SCIENTIFIC CONFERENCE OF DOCTORAL SCHOOLS

BOOK OF ABSTRACT

2024

SCDS-UDJG 2024
The Twelfth Edition,
GALAȚI, 6th-7th of June 2024

„DUNĂREA DE JOS" UNIVERSITY
OF GALATI

“DUNĂREA DE JOS”
UNIVERSITY OF GALATI
DOCTORAL SCHOOL OF BIOMEDICAL SCIENCES

BOOK OF ABSTRACTS
Scientific Conference of Doctoral Schools

SCDS-UDJG 2024
The Twelfth Edition

GALAŢI, 6th-7th of June 2024

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Section 8
RECENT THEORIES IN MEDICAL RESEARCH

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RECENT PRACTICES IN MEDICAL RESEARCH

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ADVANCED RESEARCH IN PHARMACEUTICAL SCIENCES

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FRIDAY – 7th of June 2024

SECTION 8
RECENT THEORIES IN MEDICAL RESEARCH

Chairs: Aurel Nechita, Dana Tutunaru

OP. 8.1 (9^{00}-9^{10})	Roxana Cătălina Ferea, Stejara Nicoleta Mihai, Gabriela Balan, Dana Tutunaru, Alin Laurențiu Tatu	Sweet Syndrome associated with Myelodysplastic Syndrome- a review of a multidisciplinary approach
OP. 8.2 (9^{10}-9^{20})	Vodă Cristina (Chelmu), Onofrei Andreea (Popa), Nechita Aurel, Mehedinți Mihaela – Cezarina	Update on the study of angiogenesis in surgical wounds in patients with childhood obesity
OP. 8.3 (9^{20}-9^{30})	Ciortea Diana-Andreea, Ursu Maria, Aurel Nechita	Unraveling Pediatric Sepsis: Investigating Dysregulated ADH Secretion and Its Influence on Fluid Dynamics
OP. 8.4 (9^{30}-9^{40})	Andreea Onofrei (Popa), Cristina (Chelmu) Voda, Andreea Eliza Zaharia, Dana Tutunaru, Mihaela Cezarina Mehedinti	COL11A1 a useful immunohistochemical marker for immunotherapy in breast cancer?
OP. 8.5 (9^{40}-9^{50})	Paul Şerban Popa, Mădălina Nicoleta Matei	Balancing Act: The Dual Role of Oxidative Stress in Human Health
OP. 8.6 (9^{50}-10^{00})	Mihaela Dediu-Anghel, Doina Carina Voinescu, Corina Manole	Is this the end of central venous pressure use in fluid responsiveness assessment?
OP. 8.7 (10^{00}-10^{10})	Florentina Năstase, Alin Laurențiu Tatu	Impact of primary hyperhidrosis on the quality of life of children
OP. 8.8 (10^{10}-10^{20})	Lenuta Munteanu (Ambrose), Isabela Gabriela Rauta (Verga), Aura Silvia Costin (Mateescu), Carmen Loredana Cliveti (Petrea), Aurel Nechita, Mihaela Cezarina Mehedinti	Updates in the pathology of precancerous lesions of the upper digestive tract with hemorrhagic manifestations
OP. 8.9 (10^{20}-10^{30})	Gabriela Leață, Kamel Earar, Corneliu Munteanu	Production and microstructural evaluation of the biodegradable system Mg-Ca-xSr (x=0.5; 1) used in medicine.
OP. 8.10 (10^{30}-10^{40})	Laura Bujoreanu Bezman, Aurel Nechita, Carmen Tiutiuca, Geanina Totolici, Nicoleta Cârneciu, Florin Ciprian Bujoreanu, Dimofte Florentin	Blood transfusions, a new independent risk factor for ROP
OP. 8.11 (10^{40}-10^{50})	Andrei-Lucian Zaharia, Croitoru Ana, Bianca Stan, Claudiu Elisei Tanase, Violeta Diana Oprea, Mihaela Lungu, Dana Tutnaru	New therapeutic options in advanced Parkinson's disease
OP. 8.12 (10^{50}-11^{00})	Mihalcia (Ailene) Daniela, Răuță (Verga) Gabriela Isabela, Rebegea Laura Florentina, Nechita Aurel	The role of the multidisciplinary team in the management of prostate cancer. Challenges and controversies.
11^{00}-11^{30} Coffee Break		
OP. 8.13 (11^{30}-11^{40})	I. Grigore, E. Stamate, O. Duca, A-I. Piraianu, A-N.Tovîrnac, R. Ciobotaru, O. Ciobotaru	The Impact of Dyslipidemia and elevated lipoprotein(a) on Coronary Artery Disease

OP.8.14 (11^{40}-11^{50})	Marin Cristina Mihaela, Dodul Cristina, Barbu Raisa Eloise, Berbece Ion Sorin, Sapira Violeta	The role of cardiac biomarkers in the management of stroke patients
OP. 8.15 (11^{50}-12^{00})	Cosmin-Răducu Răileanu, Lucian-Daniel Peptine, Larisa Goroftei, Elena Dudău, Gabriela Gurău	Decoding pediatric sepsis: a novel approach using artificial intelligence
OP. 8.16 (12^{00}-12^{10})	Elena Stamate, A-I. Piraianu, O. Duca, I. Grigore, R. Ciobotaru, O. Ciobotaru	ST- Elevation Myocardial Infarction from Septic Emboli Secondary to Infective Endocarditis
OP. 8.17 (12^{10}-12^{20})	Răuță (Verga) Gabriela Isabela, Mihalcia (Ailene) Daniela, Ambrose Lenuța, Petrea (Cliveți) Carmen Loredana, Mateescu Costin Aura Silvia, Gurău Tudor Vladimir, Voinescu Doina Carina	HLAB27-positive spondyloarthropathy versus HLAB27-negative spondyloarthropathy
OP.8.18 (12^{20}-12^{30})	Mihaela Dediu – Anghel, Doina Carina Voinescu, Corina Manole	Evaluation of cardiac output in critically ill patients using echocardiography
OP.8.19 (12^{30}-12^{40})	Zaharia Andreea Eliza, Matache Elena-Roxana (Vasilache), Andreea Onofrei (Popa), Gurău Gabriela	The trend in the molecular diagnosis of digestive infections
OP.8.20 (12^{40}-12^{50})	Larisa Goroftei, Cosmin Răducu Răileanu, Alexandra Mihaela Crestez, Gabriela Gurău	Case study: Multidrug Resistance for Klebsiella Oxytoca in Recurrent Urinary Tract Infection in a Child
OP.8.21 (12^{50}-13^{00})	Teodor Paul Chioasca, Mihaela Cezarina Mehedinti	Management Strategies for Peri-Prosthetic and Peri-Implant Tissue in the Context of Insulin-Dependent Diabetes Mellitus
13^{00}-14^{00} Lunch		
OP.8.22 (14^{00}-14^{10})	Alexandra Mihaela Crestez, Larisa Goroftei, Mihaela Debita	Neurologic Complications of Viral Respiratory Infections detected by PCR Method in children
OP.8.23 (14^{10}-14^{20})	Ilie Lacramioara, Eva Maria Elkan, Popa Andreea, Goroftei Larisa, Zaharia Andreea Eliza, Voinescu Doina Carina, Gurau Gabriela	The Incidence and Immunological Diagnosis of Celiac Disease in Children
OP.8.24 (14^{20}-14^{30})	Lucian-Daniel Peptine, Cosmin-Răducu Răileanu, Mirela-Cornelia Alexandrache Elena-Roxana Matache (Vasilache), Gabriela-Isabela Verga, Gabriela Gurău	Temporal Trends and Characteristics of Healthcare-Associated Infections at the Children's Hospital in Galați: A Retrospective Analysis
OP.8.25 (14^{30}-14^{40})	Elena-Roxana Matache (Vasilache), Andreea Eliza Zaharia, Gabriela Gurau, Dana Tutunaru	Viral etiology of acute respiratory infections in young children
OP.8.26 (14^{40}-14^{50})	Covaci Antoanela Magdalena, Dana Tutunaru, Lucian Toma Ciocan, Andreea Cristina Didilescu	Shear test for two dental materials: BioMTA+ and TheraCal LC
OP.8.27 (14^{50}-15^{00})	Roxana Cristina Mehedinti, Dana Tutunaru, Antoanela Magdalena Covaci	Oral lichenoid lesions associated with dental amalgam
OP.8.28 (15^{00}-15^{10})	Mădălina Duceac, Doina Carina Voinescu	Osteoporosis, a risk factor in lumbar disc herniation
OP.8.29 (15^{10}-15^{20})	Stan (Grosu) Bianca, Prof .Univ.Habil. Dr Drima Eduard	Catatonia in patients with Dementia. The importance of biomarkers in the early treatment.
OP.8.30 (15^{20}-15^{30})	Stoian Valerian-Ionut, Telehuz Anca, Draghiev Iulia, Debita Mihaela	Measles Evolution In The Galati County In The 2012-2023 Period
15^{30}-16^{00} Coffee Break		

PP.8.31 (16^{00}-16^{10})	Marina Bogdan, Liuba Corețchi	Control of health risk associated with occupational exposure to ionizing radiation (PhD project)
PP.8.32 (16^{10}-16^{20})	Anca Iulia Neagu, Diana Gina Poalelungi, Marius Neagu, Aurel Nechita	A rare mesenchymal tumour of the peritoneum
PP.8.33 (16^{20}-16^{30})	Luciana Loredana Limbalata, Luminita Georgescu, Elena Ioana Iconaru	The role of physiotherapy in improving anthropometric parameters in prepubertal children with scoliosis
16^{30}-17^{00} Concluding remarks **17^{00}-18^{00} – Awarding and Closing ceremony**		

FRIDAY – 7th of June 2024

SECTION 9
RECENT PRACTICES IN MEDICAL RESEARCH

Chairs: Manuela ARBUNE, Anamaria CIUBARĂ

OP. 9.1 (9^{00}-9^{10})	Corina Popazu Rîșcă, Alina Lescai, Violeta Diana Oprea, Alice Laura Bocancia, Mihai Cristian Marinescu, Sorina Nicoleta Munteanu, Claudiu Elisei Tănase, Luiza- Camelia Nechita, Aurelia Romila	Thrombosis of the left renal artery during COVID-19 - clinical case presentation and literature review.
OP. 9.2 (9^{10}-9^{20})	Violeta Diana Oprea, Corina Popazu Rîșcă, Alina Lescai, Alice Laura Bocancia, Mihai Cristian Marinescu, Sorina Nicoleta Munteanu, Claudiu Elisei Tănase, Andrei Lucian Zaharia, Mihaela Lungu, Aurelia Romila	Early depressive manifestations in alzheimer's disease patients: prodromal occurrence or related etiopathogeny?
OP. 9.3 (9^{20}-9^{30})	Violeta Diana Oprea, Corina Popazu Rîșcă, Alina Lescai, Alice Laura Bocancia, Mihai Cristian Marinescu, Sorina Nicoleta Munteanu, Claudiu Elisei Tănase, Andrei Lucian Zaharia, Luiza-Camelia Nechita, Mihaela Lungu, Aurelia Romila	The interplay between cardiovascular pathology and neurocognitive deficit in geriatric patients
OP. 9.4 (9^{30}-9^{40})	Paul Șerban Popa, Mădălina Nicoleta Matei	Salivary antioxidant biomarkers and oral health dynamics in young athletes: an insight into competitive sports' impact
OP. 9.5 (9^{40}-9^{50})	Mihai Cristian Marinescu, Violeta Diana Oprea, Corina Popazu, Claudiu Elisei Tanase, Alice Laura Bocancia, Sorina Nicoleta Munteanu, Luiza- Camelia Nechita, Aurelia Romila	Carbohydrate antigen 125 (CA 125): a novel biomarker in acute heart failure
OP. 9.6 (9^{50}-10^{00})	Paduraru Ana-Maria, Mihai Polinschi, Drima Eduard Polea	Importance of biomarkers in liver diseases
OP. 9.7 (10^{00}-10^{10})	Adrian Silaghi, Vlad-Denis Constantin, Ion G. Motofei, Cristian Balalau, Dragos Serban, Mihai Polinschi, Laura-Florentina Rebegea	Prediction factors for survival , complications and quality of life at patients with complicated colonic cancer

OP. 9.8 (10^{10}-10^{20})	Cristina Torlac, Elena Niculet, Alin Laurentiu Tatu	Reactive cutaneous-mucosal manifestations with allergic character post-medication
OP. 9.9 (10^{20}-10^{30})	Florentina Năstase, Alin Laurențiu Tatu	The effect of ionization on the quality of life of children with hyperhidrosis
OP. 9.10 (10^{30}-10^{40})	Laura Alice Bocancia, Violeta Diana Oprea, Sorina Nicoleta Munteanu, Mihai Cristian Marinescu, Corina Rișcă Popazu, Claudiu Elisei Tănase, Luiza- Camelia Nechita, Aurelia Romila	Depression and anxiety - prodrome of cognitive disorders in geriatric patients with chronic kidney disease – case report
OP. 9.11 (10^{40}-10^{50})	Carolina Susanu, Anamaria Harabor, Ingrid-Andrada Vasilache, Petronela Vicoveanu, Alina-Mihaela Călin	Factors associated with maternal morbidity in patients with eclampsia in three obstetric intensive care units: a retrospective study
OP. 9.12 (10^{50}-11^{00})	George-Cosmin Popovici, Manuela Arbune, Mihai Polinschi, Aurel Nechita	The impact of COVID-19 on the tuberculosis features in a Romanian pneumology hospital
11^{00}-11^{30} Coffee Break		
OP. 9.13 (11^{30}-11^{40})	George-Cosmin Popovici, Luiza- Camelia Nechita, Manuela Arbune, Aurel Nechita	Association between obstructive sleep apnea risk and COVID-19 severity: a prospective cohort study in Romania
OP.9.14 (11^{40}-11^{50})	Avram Oana Elisabeta, Bratu Alexandra Elena, Drima Eduard Polea	AI (artificial intelligence) influences on the diagnosis and treatment of children with ASD
OP. 9.15 (11^{50}-12^{00})	Elena Gabriela Vâlcu, Anamaria Ciubară, Aurel Nechita, Dorel Firescu, Laura Florentina Rebegea	Oncological patients reactions in proposed treatment
OP. 9.16 (12^{00}-12^{10})	Valentin Bulza, Liliana Baroiu, Alexia Anastasia Stefania Baltă, Mihaela Patriciu, Daniela Ignat, Silvia Aura Costin, Raisa Barbu, Mihai Polinschi, Lutenco Valerii	Early and intensive therapeutic research
OP. 9.17 (12^{10}-12^{20})	Bratu Elena Alexandra, Avram Oana Elisabeta, Cristina Ștefănescu, Drima Eduard Polea	Multidisciplinary approach to suicidal behavior in children and adolescents
OP. 9.18 (12^{20}-12^{30})	Mihaela Hizanu (Dumitrache), Maria Valentina Popa, Madălina Duceac, Nicoleta Luchian, Letiția Doina Duceac	The benefits of "respite" services on the psycho-emotional state of families of children admitted to the hospice: preliminary study on parents' perceptions
OP. 9.19 (12^{30}-12^{40})	Monica-Daniela Pădurariu-Coviț, Aurel Nechita, Costinela-Valerica Georgescu, Iulia Chiscop, Manuela Arbune	Clinical and biological features in HIV-positive patients with cancer
OP.9.20 (12^{40}-12^{50})	Andreea Bașa (Boghean), Dorel Firescu, Ana Croitoru, Luiza- Camelia Nechita, Cristina Dodul	Demographic characteristics of patients admitted to the surgery department with cardiovascular pathology associated
OP.9.21 (12^{50}-13^{00})	Mihaela-Camelia Vasile, Claudiu-Ionut Vasile, George-Cosmin Popovici, Mihai Polinschi, Manuela Arbune	Evaluation of mental health impact in patients with moderate and severe forms of COVID-19 in Galati county: a longitudinal case-control study
13^{00}-14^{00} Lunch		
OP.9.22 (14^{00}-14^{10})	Maria Valentina Popa, Mădălina Duceac, Mihaela Dumitrache, Letiția Doina Duceac	Palliative care stressors: analysis of impact on workers and post-pandemic COVID-19 conclusions
OP.9.23 (14^{10}-14^{20})	Nicoleta Luchian, Mădălina Duceac, Letiția Doina Duceac	*Klebsiella pneumoniae* healthcare associated infections and microbial resistance
OP.9.24 (14^{20}-14^{30})	Călin Stefan Păduraru, Oana Păduraru, Mihai Polinschi, Letiția Doina Duceac	Analysis of risk management for patient safety in Romanian healthcare organizations

OP.9.25 (14^{30}-14^{40})	Maria Ursu, Diana Andreea Ciortea, Cristina Dodul, Manuela Arbune, Aurel Nechita	Retrospective of the COVID 19 pandemic on type 1 diabetes and other autoimmune diseases in children
OP.9.26 (14^{40}-14^{50})	Alina- Maria Lescai (Hincu), Violeta Diana Oprea, Mihaela Anghele, Cosmina Moscu, Liliana Dragomir, Corina Popazu, Mihai Polinschi, Aurelia Romila	Do i suffer from a psychosomatic disorder?
OP.9.27 (14^{50}-15^{00})	Mihai Ciprian Râșcu, Manuela Arbune, Carmen Loredana Petrea (Cliveți), Diana Andreea Ciortea, Laura Bujoreanu Bezman, Sorin - Ion Berbece	The use of hematogenous marrow concentrate in the treatment of aseptic necrosis of the femoral head associated with COVID-19 infection
OP.9.28 (15^{00}-15^{10})	Cliveți (Petrea) Carmen Loredana, Răuță (Verga) Isabela Gabriela, Munteanu (Ambrose) Lenuța, Candussi Laura Iuliana, Mihai Ciprian Râșcu, Berbece Sorin Ion	The hidden face of the covid-19 pandemic – post-COVID sequelae and autoimmune diseases in children
OP.9.29 (15^{10}-15^{20})	Tudor Vladimir Gurău, Gabriela Isabela Verga, Doina Carina Voinescu	The prevalence of injuries in amateur athletes practicing group sports
OP.9.30 (15^{20}-15^{30})	Sorin Leu, Jan Palade, Adrian Olaru, Laura Rebegea	Toxicities and response to treatment with checkpoint inhibitors in non-small cell lung cancer
15^{30}-16^{00}	**Coffee Break**	
PP.9.31 (16^{00}-16^{10})	Florentina Năstase, Alin Laurențiu Tatu	Primary hyperhidrosis in children
PP.9.32 (16^{10}-16^{20})	Dodul Cristina, Luiza- Camelia Nechita, Berbece Sorin, Boghean Andreea, Marin Cristina, Maria Ursu	Predictive factors of right ventricular pacing-induced cardiomyopathy
PP.9.33 (16^{20}-16^{30})	Loredana Sabina Pascu, Andrei Vlad Bradeanu, Nicolae Sârbu, Victorița Ștefănescu, Eduard Polea Drima	Imaging findings in cognitive impairment in patients with multiple sclerosis
16^{30}-17^{00} Concluding remarks **17^{00}-18^{00} – Awarding and Closing ceremony**		

FRIDAY – 7th of June 2024

SECTION 10

ADVANCED RESEARCH IN PHARMACEUTICAL SCIENCES

Chairs: Oana-Maria Dragostin, Olimpia Dumitriu (Buzia), Camelia Diaconu

OP. 10.1 (09^{00}-09^{10})	Ana Maria Chirilov (Protopopescu), Monica Talaz (Dinu), Dorin Ioan Cocoș, Olimpia Dumitriu Buzia	The pharmacotherapeutic capacity of *Ficus carica* in the context of diabetes
OP. 10.2 (09^{10}-09^{20})	Alina-Georgiana Cristea, Rodica Ene (Vatcu), Elena Lăcrămioara Lisă, Oana Maria Dragostin	Preliminary research of new molecular hybrids with azole nucleus with potential antimicrobial action
OP. 10.3 (09^{20}-09^{30})	Dorin Ioan Cocoș, Irinel Buiciuc (Lungu), Cristina Meserelicu (Bazbanela), Monica Talaz (Dinu), Ana Maria Chirilov (Protopopescu), Kamel Earar	The pharmaco-therapeutic capacity of *Geranium oil* and possible optimization of transdermal systems in oral pathology

OP. 10.4 (09^{30}-09^{40})	Florina Grumăzescu (Bonifate), Camelia Diaconu	Modern techniques for extracting quercetin from various plant sources
OP. 10.5 (09^{40}-09^{50})	Alexandra Pavel (Burlacu), Ancuța Dinu (Iacob), Claudia Simona Ștefan, Carmen Chițescu, Oana-Maria Dragostin	Obtaining new hippuric acid derivatives with potential antitumor activity
OP. 10.6 (09^{50}-10^{00})	Irinel Buiciuc (Lungu), Cristina Meserelicu (Bazbanela), Monica Talaz (Dinu), Dorin Ioan Cocoș, Olimpia Dumitriu Buzia	Grape pomace, a source of polyphenols in the management of inflammation and oxidative stress
10^{00}-10^{30} Coffee Break		
OP. 10.7 (10^{30}-10^{40})	Rodica Ene (Vatcu), Alina Cristea, Elena Lăcrămioara Lisă, Oana Maria Dragostin	Obtaining, characterization and structural confirmation of new biguanide derivatives with potential antidiabetic action
OP. 10.8 (10^{40}-10^{50})	Monica Talaz (Dinu), Irinel Buiciuc (Lungu), Cristina Meserelicu (Bazbanela), Dorin Ioan Cocoș, Olimpia Dumitriu Buzia	Cobra venom - current status and perspectives in therapeutic use
OP. 10.9 (10^{50}-11^{00})	Guido Attilio Condorelli, Giuseppe Secolo, Oana Maria Dragostin	PDRN on ADORA2A in Retinal Diseases
OP. 10.10 (11^{00}-11^{10})	Alexandru Dan Sîrbu, Ana Maria Chirilov (Protopopescu), Teodora Marcu, Olimpia Dumitriu Buzia	Research on controlled drug release systems applied to the preparation of rectal pharmaceutical forms
OP. 10.11 (11^{10}-11^{20})	Ancuța Dinu (Iacob), Alexandra Pavel (Burlacu), Alina Iancu, Dana Tutunaru, Oana Maria Dragostin_	New sulfonamide derivatives: synthesis, characterization, in Vitro evaluation of antihyperglicemic and antimicrobial activities
OP. 10.12 (11^{20}-11^{30})	Teodora Marcu, Alexandru Dan Sîrbu, Ana Maria Chirilov (Protopopescu), Olimpia Dumitriu Buzia	Antimicrobial activity of plant extracts on the development of microbial biofilms on inert substrate – review
OP. 10.13 (11^{30}-11^{40})	Cristina Meșerelicu (Bazbanela), Monica Talaz (Dinu), Irinel Buiciuc (Lungu), Dorin Ioan Cocoș, Olimpia Dumitriu Buzia	*Paeonia tenuifolia*, *Paeonia peregrina* and *Cotinus coggygria* in the spontaneous flora of Dobrogea. Actions and benefits.
11^{40}-12^{00} Concluding remarks **12^{00}-13^{00} – Awarding and Closing ceremony** **13^{00}-14^{00} – Lunch**		

SECTION 8
RECENT THEORIES IN MEDICAL RESEARCH

Plenary invited speakers

1. The relevance of Quality Certification in Forensic Science

Prof. Anna BARBARO, PhD

Dept. Forensic Genetics - Studio Indagini Mediche E Forensi (SIMEF)- Italy
Universidad de Alcalá, Departamento de Química Analítica, Química Física e Ingeniería Química, Ctra. Madrid-Barcelona km 33,6, 28871 Alcalá de Henares, Madrid, Spain.
Universidad de Alcalá, Instituto Universitario de Investigación en Ciencias Policiales, Libreros 27, 28801 Alcalá de Henares, Madrid, Spain.
President Worldwide Association of Women Forensic Experts (WAWFE)-www.wawfe.org

Abstract

Quality assurance is highly necessary in forensic science to ensure that the quality of results obtained and to demonstrate they have been produced using valid, credible, and standardized protocols and to demonstrate the competency of the forensic experts. The implementation of quality systems is a legal requirement for forensic laboratories in countries across the EU and the USA, to ensure accurate, reliable, and precise results.
In this talk, there will be discussed the application and relevance in forensics of some quality certification programs (UNI EN ISO 9001, 17020, 17024, 17025).

2. Social media facilitated sexual assault

Prof. Dr. Hakan Kar, MD

Mersin University Medical Faculty, Department of Forensic Medicine

Abstract

The sending of the first e-mail in 1971 is accepted as the beginning of "social media" history. Even

though the biggest aim of the internet is the fast sharing of economic data, social media users have used the biggest portion of the internet. The Internet has given birth to a quirky range of modern addictions and maladies such as ego surfing, blog streaking, Google-stalking, cyberchondria, photo-lurking wikipedialism etc. Sexual assault by people who were acquainted by means of social media is very frequent nowadays.

This paper presents the cases that were admitted to Mersin University Medical Faculty at the Department of Forensic Medicine by the complaint of sexual assault by those who were acquainted by means of social media. Case characteristics including age, sex, year, type of the social media, time, place, physical and genital examination findings and psychiatric outcomes are presented. Common features of social media related sexual abuse cases are highlighted.

95.8% of the 71 cases were female, average age was 15.9. Mental Retardation was diagnosed at 14.1%. One of third cases were member of a broken family. All perpetrators were male and most of them were between 14-32 years of age. Instagram was the most used platform for online dating. Most common threatening method was threatening by naked images of victims. WhatsApp was the most common platform for online sexual violence. Most of the victims were sexually assaulted within 3 months later from online dating. Nearly all of them were penetrative sexual assault. PTSD and suicidal tendency were most common psychiatric diagnosed of the victims. Educational programs to students and families which focused on safe internet usage will reduce the risk of online sexual abuse.

Keywords: Online, Sexual Assault, Social Media, Internet

3. The odyssey of forensic genetics

Prof. Dr. Ersi Kalfoglou

Abstract

Forensic Genetics is a long journey that began by the description of blood groups in 1900. The identification of biological samples was achieved via the study of a number of polymorphic enzymes and proteins together with the human leukocyte antigens besides blood groups and subgroups until the 80's. Although the studies carried out with these genetic markings gave successful results, various restrictions were the subject of discussion. While there were problems encountered especially when working with dried body stains, there were sometimes difficulties in evaluation. DNA technology, which was developed for diagnostic and therapeutic purposes at the beginning of 90's, has also been applied in forensic sciences and became indispensable. But the extraordinary exclusion power of the DNA technique and the precision of its application do not bring with it the fact that it is error-free. Today, there are various points that need to be taken into consideration when using DNA, which is defined as a magic. In addition, it is necessary for the judiciary system to be aware of the strengths and weaknesses of DNA data when used in the court.

Keywords: Forensic genetics; blood group antigens; polymorphic enzymes; HLA; STR; DNA; individualization

OP. 8.1 Sweet Syndrome associated with Myelodysplastic Syndrome- a review of a multidisciplinary approach

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Abstract

Sweet's Syndrome (SS) is a rare and acute febrile neutrophilic dermatosis, the pathogenesis of which is not entirely clear. The syndrome is characterized by sudden onset of erythematous infiltrated papules or plaques, located especially on the face, neck and upper extremities and associated with fever and neutrophilic leukocytosis. The lesions showed a dense dermal infiltration with mature neutrophils. The condition was responsive to systemic steroids. The bones, central nervous system, ears, eyes, kidneys, intestines, liver, heart, lung, mouth, muscles, and spleen can be involved in SS as extracutaneous manifestations.

More and more cases have been described to be associated with malignancies, particularly myelodysplastic syndrome and, less frequently, solid tumors or other hematologic malignancies. Approximately 21% of Sweet`s syndrome patients have an associated malignancy and up to 80% of MASS are associated with hematological diseases, especially myelodysplastic syndrome (MDS) and acute myeloid leukemia (AML).

Myelodysplastic syndrome is a clonal disorder of the bone marrow characterized by inefficient hematopoiesis, dysplastic bone marrow and peripheral cytopenia. Patients have high risk of leukemic transformation.

After analyzing later studies and current practical aspects regarding MDS related SS, we

suggest an algorithm for evaluating these patients.

Keywords: Sweet syndrome; myelodysplastic syndrome; malignancy associated SS, management, neutrophilic dermatosi

OP. 8.2 Update on the study of angiogenesis in surgical wounds in patients with childhood obesity

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Abstract

Obesity is one of the main public health issues facing pediatric patients. The increased incidence of obesity in the pediatric population poses significant challenges during and after surgical procedures.

Objective: This systematic review aimed to understand the extent to which childhood obesity influences angiogenesis in surgical wounds. Surgical intervention can be viewed as a condition that induces angiogenesis because it triggers the release of several angiogenic factors. The growth of adipose tissue in obesity is closely linked with angiogenesis, and the mass of adipose tissue depends on neovascularization.

Methods: We analyzed scientific articles extracted from international databases (PubMed, Frontiers, Elsevier ScienceDirect).

Results: Studies show that the vascular disruption following surgery leads to hypoxia in injured tissues. Hypoxia, as a primary stimulus, triggers angiogenesis. In response to hypoxia, the transcription factor hypoxia-inducible factor 1 (HIF1) activates hundreds of genes, including vascular endothelial growth factor (VEGF), which is the main angiogenic factor in adipose tissue.

Conclusion: The increased prevalence of obesity underscores the importance of understanding the cellular and molecular mechanisms underlying adipose tissue development and its relationship with systemic metabolism. Adipose tissue angiogenesis is central to these mechanisms as it controls adipocyte metabolism, establishes communication between adipose tissue and the rest of the body, and is critically necessary for progenitor cell proliferation and tissue remodeling.

Keywords: childhood obesity, angiogenesis, angiogenic factor.

OP. 8.3 Unraveling Pediatric Sepsis: Investigating Dysregulated ADH Secretion and Its Influence on Fluid Dynamics

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Abstract

Background: Pediatric sepsis poses a significant clinical challenge, characterized by a dysregulated host response to infection leading to multi-organ dysfunction. While considerable efforts have been directed towards understanding the immunological and inflammatory aspects of sepsis, recent research has underscored the pivotal role of dysregulated fluid dynamics in its pathophysiology. In particular, dysregulated secretion of antidiuretic hormone (ADH), also known as vasopressin, has emerged as a crucial mediator of fluid imbalance in septic patients, with profound implications for clinical outcomes.

Material and metodes: By examining the intricate feedback loops involved in ADH secretion, including osmoregulation and baroreceptor-mediated pathways, we elucidate the factors contributing to dysregulated ADH secretion observed in septic patients.

Results and discussions: Drawing upon case studies and clinical examples, we highlight the practical implications of dysregulated ADH secretion on fluid resuscitation strategies and clinical outcomes in pediatric sepsis. Additionally, we discuss emerging therapeutic interventions targeting ADH signaling pathways, such as vasopressin receptor antagonists and selective V2 receptor agonists, and their potential role in mitigating fluid imbalance and improving outcomes in septic patients.

Conclusions: By unraveling the complexities of ADH-mediated fluid imbalance in pediatric sepsis, this presentation aims to inform clinical practice and inspire further research into personalized management strategies for this life-threatening condition.

Keywords: poliuria, antidiuretic hormone, fluid imbalance, sepsis

OP. 8.4 COL11A1 a useful immunohistochemical marker for immunotherapy in breast cancer?

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Abstract

According to the 2022 statistics, made by the GLOBAL CANCER OBSERVATORY regarding incidence and mortality in Romania, breast cancer is the most common type of cancer among women and also the main cause of death.

In 2022, Qi Luo and his collaborators carry out a study that is published in Frontiers in Genetics, they talk about the emergence of resistance to classical therapies, such as hormone therapy and chemotherapy, in the treatment of breast cancer. That's why he considers immunotherapy as a future alternative.

Yi-Hui Wu and his collaborators describe in an article published in 2022, in Frontiers in Oncology, the role of the extracellular matrix in cancer progression. Collagen is an important component of the extracellular matrix and it was found that type XI collagen is associated with angiogenesis, tumor invasion and the emergence of drug resistance.

Collagen XI is a triple helix made of three different chains: alpha 1, alpha 2 and alpha 3. In the breast, it was observed that COL11A1 stimulates the proliferation of tumor cells by inhibiting apoptosis, stimulates metastasis and immune infiltration.

The researchers concluded that COL11A1 is involved in the immune infiltration of breast cancer, which is why it is considered that it could play a role in the development of immunotherapy.

Keywords: breast cancer, immunotherapy, COL11A1

OP. 8.5 Balancing Act: The Dual Role of Oxidative Stress in Human Health

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Abstract

Oxidative stress, a biological phenomenon marked by an imbalance between the production of reactive oxygen species (ROS) and the body's ability to detoxify these reactive intermediates or repair the resulting damage, plays a complex role in human health. This paper aims to elucidate the multifaceted effects of oxidative stress on the human body, highlighting both its detrimental and beneficial impacts. Traditionally viewed through the lens of its negative consequences, oxidative stress is a critical contributing factor to the pathogenesis of numerous chronic diseases, including cardiovascular diseases, diabetes, neurodegenerative disorders, and cancer. The excessive production of ROS can lead to cellular and tissue damage, inflammatory responses, and DNA mutations, thereby accelerating the aging process and the progression of various diseases. However, recent research has begun to shed light on the positive aspects of oxidative stress, emphasizing its role as a necessary physiological process for normal cellular functions and signaling. Low to moderate levels of ROS are essential for the defense against microbial infections, the regulation of cellular signaling pathways, and the promotion of a healthy immune response. Furthermore, adaptive responses to mild oxidative stress can enhance the body's antioxidant defenses, a concept central to the hormesis theory, which suggests that exposure to low doses of a potentially harmful stressor can elicit adaptive beneficial effects on the cell or organism. In navigating the dual nature of oxidative stress, this paper discusses the mechanisms underlying the production and scavenging of ROS, the biomolecular consequences of oxidative damage, and the body's intricate defense systems, including enzymatic and non-enzymatic antioxidants. It also explores the pivotal role of lifestyle factors, dietary antioxidants, and pharmacological interventions in modulating oxidative stress levels and optimizing human health. By providing a comprehensive overview of the current knowledge on oxidative stress and its implications for human health, this paper aims to contribute to a deeper understanding of its dual role as both a villain and a hero in the biological context. Recognizing the fine line between beneficial and harmful effects of oxidative stress is crucial for developing targeted strategies to prevent oxidative stress-related diseases and enhance overall well-being.

Keywords: Oxidative Stress, Reactive Oxygen Species (ROS), Antioxidant Defense Mechanisms, Chronic Diseases, Cellular Damage, Inflammatory Responses, Cellular Signaling

OP. 8.6 Is this the end of central venous pressure use in fluid responsiveness assessment?

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Abstract

Introduction: When we talk about fluid responsiveness in critically ill patients, we're referring to the main question every clinician should ask before administering any amount of fluid: will there be an increase in stroke volume and cardiac output? Because, fundamentally, this is the only reason to administer a fluid to a patient. Central venous pressure (CVP) has been used for decades to assess fluid responsiveness based on the relatively simple idea that CVP reflects intravascular volume, but we now know this to be a misconception. CVP is influenced not only by intravascular volume, but also by venous tone, intrathoracic pressure, abdominal pressure and the compliance of both ventricles.

Material and Methods: This paper is an article review that aims to analyse the relevant meta-analyses of CVP and explores a new theoretical concept: mean systemic filling pressure - Pmsf - which is defined as the mean pressure that exists in the circulatory system when there is no blood movement, which is obviously impossible to measure in a beating-heart patient, but it's importance is underlined in the formula for venous return, which is directly proportional to the gradient between right atrial pressure and Pmsf. In other words, it's the pressure that propels blood flow to the right atrium.

Results: Numerous meta-analyses have demonstrated the weak association between CVP and circulating blood flow, meaning that CVP has a poor ability to predict fluid responsiveness, and if increasing CVP was one of our goals in the past in a shocked, hypovolemic and unstable patient, we now understand that a significant increase in CVP may be rather worrying and that we may have already crossed the upper limit of fluid tolerance.

Conclusions: We live in an era of rapid technological evolution, and we have many other tools at our disposal for assessing fluid responsiveness, the most promising being the ultrasound. This paper aims to prove that, despite everything, we can still use CVP in our daily practice, as part of a dynamic assessment of fluid status and in relation to other tools, but we need to understand its limitations.

OP. 8.7 Impact of primary hyperhidrosis on the quality of life of children

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Abstract

Introduction: Primary hyperhidrosis (PH) is a paediatric inherited skin disease, somatic and idiopathic. Eccrine glands are tiny and very numerous, approximately 3 million, distributed throughout the skin. There is no commonly accepted amount of sweating to define hyperhidrosis. **Material and method:** There are various quality of life evaluation questionnaires for hyperhidrosis. **Results:** The skin is the most visible and prominent part of the body and it is very important for the perception of those around, especially for young people. Loneliness can be defined as the low quality of relationships or as the lack of socialization of a person due to the absence of intimacy, closeness and emotionality. Teenagers with hyperhidrosis, like other skin problems, acne or psoriasis for example, are known to have an increased level of loneliness.

Keywords: hyperhidrosis, quality of life, loneliness.

OP. 8.8 Updates in the pathology of precancerous lesions of the upper digestive tract with hemorrhagic manifestations

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Abstract

Cancers of the upper gastrointestinal tract represent one of the most important causes of death worldwide. These mainly include those affecting the esophagus and stomach. Early identification of precancerous lesions reduces the incidence of these cancers, improves the overall outcome and maintains a good quality of life for patients.

According to Global Cancer Statistics 2020, gastric cancer remains the fifth most common malignancy and the fourth leading cause of cancer death globally and esophageal cancer is the eighth most common type of cancer worldwide and the sixth leading cause of death through cancer. Precancerous gastric lesions such as atrophic gastritis, intestinal metaplasia and dysplasia have been identified as the main risk factors in gastric cancer, and Barrett's esophagus and squamous dysplasia have been identified for esophageal cancer. Precancerous lesions of the esophagus and stomach are cellular abnormalities that have the potential to turn into cancer over time.

Prevention, awareness of symptoms, early detection through screenings are the main tools of safeguarding the health and well-being of those affected.

Keyword: precancerous lesions, upper digestive tract, hemorrhagic manifestations

OP. 8.9 Production and microstructural evaluation of the biodegradable system Mg-Ca-xSr (x=0.5; 1) used in medicine

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Abstract

Introduction: The biomedical field is paying increasing interest to biodegradable magnesium (Mg) alloys, which are very attractive due to their non-toxicity. These alloys are characterized by high biocompatibility, easy biodegradation, low density and good mechanical properties.

Material and method: A major disadvantage of these alloys is represented by their behavior in the physiological environment, where they present a low resistance to bio-corrosion. Research shows that by adding Sr, it leads to a significant improvement in the bio-corrosion resistance of the alloys. Even the smallest amount of Sr and/or Ca leads to an improvement in the biodegradation of the alloy. In this research, the production method is presented using an inert atmosphere (Ar) elaboration furnace, the charge calculation for the two compositions and at the same time, the properties and microstructural structures of the Mg-Ca-XSr alloy were investigated , with different percentages of Sr (0.5; 1.), finding an excellent refinement of the microstructure, which is fine, without pores or other defects.

Results: From the structural analysis carried out by X-ray diffraction, it is observed that the predominant phase is Mg2Ca (hexagonal structure) and the secondary phase MgSr (cubic structure).

Conclusions: Continuous improvement of the properties of these alloys is given both in terms of alloying and the use of appropriate processing.

Keywords: biocompatibility, bio-corrosion, Mg, Sr, biomedical

OP. 8.10 Blood transfusions, a new independent risk factor for ROP

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Abstract

This paper highlights the novelties about the influence of blood transfusion on retinopathy of prematurity (ROP). The etiopathogenesis of ROP is not fully known, and for this reason, the research on the risk factors is in a continuous dynamic. Recently, blood transfusions have been frequently reported in the literature as an independent risk factor for ROP. Blood transfusions contain adult hemoglobin, which, compared to fetal hemoglobin, has a lower affinity for oxygen. Due to the reduced affinity, the oxygen-hemoglobin dissociation curve deviates to the right and generates too much oxygen supply for an incompletely developed retina. In addition to the traditional risk factors, blood transfusions represent a new potential independent risk factor for the development of ROP.

Keywords: ROP, blood transfusions, risk factors

OP. 8.11 New therapeutic options in advanced Parkinson's disease

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Abstract

Parkinson's disease is a progressive neurodegenerative disease of the central nervous system and the vegetative nervous system, but which also affects some non-neuronal structures outside the central nervous system. It is the second most common neurodegenerative disease after Alzheimer's disease. The progressive character of the disease determines the worsening of motor and non-motor symptoms. Currently, the knowledge available about the disease, as well as the emergence of innovative therapies, allow improving the quality of life of patients and their families. However, we still do not have a curative treatment for the disease caused by dopamine deficiency in the brain. Dopamine has a primary role in the functioning of circuits in the basal ganglia, and continuous, constant stimulation of dopamine receptors is necessary to regulate the excitability of striatal neurons. The pulsatile stimulation of dopamine receptors, which occurs in Parkinson's disease, but also in the administration of oral medication, leads to the abnormal functioning of the basal ganglia, which causes the appearance of the motor and non-motor symptoms that characterize Parkinson's disease. Injectable apomorphine is indicated for the treatment of on-off motor fluctuations in patients with Parkinson's disease insufficiently controlled with other antiparkinsonian medication. The subcutaneous route of administration avoids the first-pass effect observed with oral medication. Absorption is similar for pen or pump administration.

Keywords: Parkinson disease, neurodegenerative disease, apomorphine.

OP. 8.12 The role of the multidisciplinary team in the management of prostate cancer. Challenges and controversies

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Abstract

The purpose of the multidisciplinary uro-oncology team meeting is to perform a comprehensive evaluation of the patient's medical history, clinical examination findings, tests and biopsy results. This assessment, carried out by a team of urologists, radiologists, histopathologists, nurses, medical oncologists and surgeons, allows them to collaboratively carry out an interdisciplinary assessment and to engage in the development of an appropriate case management plan. This procedure is supported and encouraged by numerous international committees and associations and represents high standard practice. Studies show data indicating that patients have a higher level of acceptance of this particular model of management process.

The multidisciplinary team approach ensures that the prostate cancer patient is more likely to obtain sufficient information about the disease and all available treatment options, weighing the associated benefits against the negative effects.

At the same time, some research has raised questions about the effectiveness of multidisciplinary team meetings, as it has been found that this approach to the management of a patient consumes significant resources that are not directly proportional to the usefulness of the process.

Clinical trials that are currently under investigation or in future studies will help physicians with specific management concerns, but will not be able to address all the controversies.

Keywords: management, multidisciplinary, oncology

OP. 8.13 The Impact of Dyslipidemia and elevated lipoprotein(a) on Coronary Artery Disease

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Abstract Coronary artery disease (CAD) is a chronic, most often progressive disease characterized by the accumulation of atherogenic lipoproteins, inflammatory cells, and fibrillar collagen in focal areas of arteries, which results in the formation and progression of atherosclerotic plaques.

As buildup of plaque, they can cause partial or complete obstruction to blood flow, which may lead to clinical manifestations, such as stable/unstable angina or myocardial infarction(MI), heart attack or ischemic stroke.

Elevated low-density lipoprotein cholesterol (LDL-C) is a major risk factor for atherosclerosis. Lowering LDL-C reduces the risk of coronary artery disease, myocardial infarction, and ischemic stroke.

Elevated lipoprotein(a) [Lp(a)] is an inherited, independent, and causal risk factor for cardiovascular (CV) disease.

The presence of elevated Lp(a) is largely genetically determined and therefore influences atherogenicity from birth, leading to a cumulative risk of ASCVD. Lp(a) promotes atherosclerosis progression and an increased risk of thrombosis through its pro-atherogenic and pro-inflammatory. Elevated Lp(a) levels appear to be associated with a more severe presentation and complex-to-treat form of CAD. Knowledge of Lp(a) levels in patients with CAD may have implications in the clinical management of this vulnerable population.

The most frequently encountered clinical scenarios in patients with suspected or established CCS are: (i) patients with suspected CAD and ‘stable’ anginal symptoms, and/or dyspnea;

The main complication of coronary artery disease is a heart attack. This is a medical emergency that can be fatal. Your heart muscle starts to die because it’s not receiving enough blood. You need prompt medical attention to restore blood flow to your heart and save your life.

Keywords: Coronary artery disease, low-density lipoprotein cholesterol (LDL-C), inflammatory cells.

OP. 8.14 The role of cardiac biomarkers in the management of stroke patients

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Abstract

This paper presents that in an acute stroke, the presence of elevated cardiac enzymes could be either a secondary cardio-embolic complication in a patient with primary myocardial injury or a secondary myocardial injury in a patient with primary cerebral ischaemia. Central activation of the sympathoadrenal system is known to occur in some cases of acute stroke that could lead to cardiac sequelae such as cardiac myocytolysis, increased cardiac enzymes and arrhythmogenic disorders. Early identification of stroke-related morbidity and mortality can help reduce mortality and improve functional outcome by developing management strategies in at-risk populations. The changes in central nervous system metabolism influence cardiac function. Cardiac changes that occur in stroke patients are closely related to excessive activation of the sympathetic nervous system that occurs as a result of damage to the insular cortex. Cardiac biomarkers have also been shown to increase in some acute stroke patients without any cardiac injury. Assessment of these enzyme levels may be a readily available method for assessing severity, course, prognosis, and to some extent in the differential diagnosis of different stroke subtypes. As a result we aim to determine the association between cardiac biomarkers: cardiac troponin, BNP,NT-proBNP, D-dimer, and CK-MB, and acute stroke.

Keywords: stroke, cerebral ischaemia, cardiac biomarkers

OP. 8.15 Decoding pediatric sepsis: a novel approach using artificial intelligence

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Abstract

Introduction: In 2017, the World Health Assembly and WHO recognized sepsis as a critical global health issue due to its significant impact on morbidity and mortality worldwide. Artificial intelligence (AI) algorithms have emerged as crucial tools in tackling this pervasive threat to public health on a global scale. The objective of this study was to create a prediction algorithm designed to forecast the risk of hospital mortality among patients with sepsis.

Material and Methods: To create a predictive model for sepsis, between January 2022 - December 2023**,** 43 bacterial strains were isolated from blood and analyzed using Copilot by Microsoft from patients hospitalized at Emergency Clinical Hospital for Children „Sf. Ioan" Galați. The following data were provided for Copilot: diagnosis, identified germ, age, sex, environment and antibiotic resistance data.

Results: The following were considered significant: *Staphylococcus aureus, Escherichia coli* and *Salmonella spp*. (11.63%); The AI was unable to make a prediction algorithm based on the data provided because 72.09% of the bacteria reported was represented by contaminating coagulase-negative Staphylococci (SCN) which leads to unnecessary prescription of antibiotics. Copilot mentioned that contamination of blood cultures is often caused by improper specimen collection technique.

Conclusions: AI sepsis prediction is rapidly advancing, yet lacks prospective studies. Further research is crucial for integrating AI into clinical settings and understanding its impact on patient outcomes.

Keywords: blood culture, artificial intelligence, sepsis.

OP. 8.16 ST- Elevation Myocardial Infarction secondary to Septic Emboli due to Infective Endocarditis

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Abstract Infectious endocarditis (IE) is a rare disease characterized by infection of the endocardial surface of the heart and valves. IE continues to be associated with great challenges. Septic embolic events are frequent and life-threatening complications in IE patients, with an increased risk of morbidity and mortality. It remains challenging to predict and assess the embolic risk in individual patients with IE accurately. When septic embolization occurs in the coronary arteries, IE is complicated by acute coronary syndrome (ACS) and the worst prognosis may even be a cardiogenic shock (CS). Studies investigating the impact of CS on endocarditis are lacking.

We present a case of IE complicated by coronary artery embolization and ST-elevation myocardial infarction (STEMI) and CS at the time of presentation to the emergency department, followed by unresuscitable cardiorespiratory arrest. In this case of death, IE and ACS were diagnosed *post-mortem.*

IE predominately involves the left-sided valves; however, right-sided valvular IE has increased in incidence with intravenous drug use. Mitral valve endocarditis with embolization to the left anterior descending coronary is the most common situation described in the literature. In addition, previous literature has suggested that anterior mitral valve vegetations have the highest embolic risk at 37% compared to general mitral vegetations (25%) and aortic vegetations (10%). When embolization does occur, it most frequently affects the left anterior descending artery. However, physicians face many challenges when it comes to acute septic myocardial infarction, challenges such as lack of standardization of management in these cases or lack of clear evidence because so far only case reports or small studies have been published addressing this topic. These challenges if highlighted, may represent future lines of research in this field, which in turn contribute to the evolution of patient-based personalized medicine.

Keywords: infective endocarditis, septic embolization, acute coronary syndrome

OP. 8.17 HLAB27-positive spondyloarthropathy versus HLAB27-negative spondyloarthropathy

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Abstract

Introduction: Seronegative spondyloarthropathies include different forms of inflammatory arthritis, they can affect peripheral joints or the spine. Their prototype is ankylosing spondylitis (AS). Ankylosing spondylitis is an immune-mediated chronic inflammatory disease, polygenic, characterized by low back pain, inflammation in the peripheral joints and entheses. The presence of HLA B27 antigen (human leukocyte antigen-B27), one of the most fascinating molecules in medicine, represents a key genetic background. One of the strongest associations between a major histocompatibility complex molecule and disease is that between HLA B27 and ankylosing spondylitis. HLA B27 Ag is present in approximately 90% of patients with this disease. A smaller association was shown between HLA B27 and reactive arthritis, psoriatic arthritis and acute anterior uveitis. In some patients diagnosed with AS, the HLA B 27 allele was not detected, which causes the diagnosis to be delayed. The present study aims to analyze the similarities and differences of clinical and paraclinical characteristics, the influence of comorbidities in patients with positive versus negative HLAB 27 antigen.

Material and method: The retrospective study was carried out on a group of patients admitted to the Rheumatology section of the "Sfântul Apostol Andrei" Galati County Emergency Clinical Hospital between 01.01.2022 and 01.10.2022.

Results: The HLAB27 positive group had a higher frequency of eye disease and cardiac involvement, they had more severe radiological lesions. The HLAB27-negative group showed longer diagnostic delay, less radiographic severity, less joint and spine involvement. Patients in both study groups received biological treatment with Infliximab, a human-murine chimeric IgG1 monoclonal antibody produced by recombinant DNA technology. HLAB 27 antigen is strongly associated with AS and may be a predictor of treatment response.

Conclusions: In conclusion, the prognosis is dictated by the result of the HLA B27 analysis, the precocity of the correct diagnosis, the clinical form of the disease, the presence of comorbidities and the patient's compliance with the treatment

Keywords: Ankylosing spondylosis, HLAB27, biological treatment, spondyloarthropathy seronegative

OP. 8.18 Evaluation of cardiac output in critically ill patients using echocardiography

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Abstract

Introduction: Cardiac output - CO- represents the amount of blood pumped by the heart in one minute and is the key factor in the overall transport of oxygen from the heart to vital organs and tissues. Measuring stroke volume and cardiac output is fundamental to the hemodynamic management of critically ill patients in intensive care unit and unstable patients in the operating room.

Material and Methods: This paper is an article review that aims to analyse the role of echocardiography in critically ill patients management. We know that cardiac output is equal to the stroke volume (the amount of blood ejected by the heart in a single beat) multiplied by the heart rate. While heart rate is a variable easy to observe on a regular monitor, estimating stroke volume is a difficult task. Methods for measuring CO include the pulmonary artery catheter, transpulmonary thermodilution and pulse contour analysis, but all require invasive catheters with a substantial risk of complications. Transthoracic echocardiography (TTE) or transesophageal echocardiography (TEE) are less risky alternative methods for assessing cardiac output.

Results: Echocardiography can help intensive care physicians in various situations such as hemodynamic instability or in the perioperative period when an ultrasound examination can provide important clues in diagnostic and therapeutic options. However, the aim of this paper is to highlight the importance of echocardiography in the assessment of cardiac output performed by the intensive care physician. Clearly, echocardiography is not a recent discovery. What is new is that intensivists can be trained to obtain hemodynamic profile parameters such as stroke volume and ejection fraction in a relatively simple way, without a six-month training program, usually required for cardiologists. After familiarizing themselves with the main functions and settings of the device, the intensivist will position the probe parallel to the transaortic blood flow and measure a surrogate of the stroke volume and the result will be a number corresponding to the stroke volume.

Conclusions: Although there are a number of limitations and pitfalls we will address in this paper, daily training will reduce the likelihood of any of these errors, providing a high-quality, fast and relatively safe tool for personalized hemodynamic management of the critically ill patient.

OP. 8.19 The trend in the molecular diagnosis of digestive infections

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Abstract

Introduction: Infectious digestive pathology is a topical problem due to the high frequency of diarrheal episodes among children. The objective of the conducted study consisted in the comparative analysis of the results obtained by the multiplex Real Time Polymerase Chain Reaction (RT-PCR) method and the classic methods of identifying infectious agents involved in digestive pathology. **Material and Methods:** The study included a group of 24 patients with specific symptoms, hospitalized between July and December 2023 at the Emergency Clinical Hospital for Children "Sf Ioan" from Galati. Faecal samples were collected from spontaneously emitted stool of the patients and used for the identification of digestive infectious agents. The RT-PCR method used multiplex panels for the identification of viruses (norovirus GI, norovirus GII, rotavirus, adenovirus, astrovirus, sapovirus) and intestinal bacteria (*Aeromonas spp, Campylobacter spp, Clostridium difficile toxin B, Salmonella spp, Shigella spp./EIEC, Vibrio spp, Yersinia enterocolitica*) and in parallel rapid antigen tests (latex-agglutination), coprocytogram and coproculture were performed. **Results**: The results of the studied group showed an increased incidence of digestive infections in children under the age of 5. The gender distribution was equal and the urban environment had a higher frequency (20 children). Multiplex RT-PCR panels revealed an increase in the number of positive infections with norovirus (7 patients with norovirus G2, 1 patient with norovirus G1), followed by the frequency of rotavirus (5 patients), co-infections were present in 8 patients. **Conclusions**: Compared to the classic methods of identifying digestive infectious agents, multiplex RT-PCR panels detect precisely and very quickly a varied range of viruses and bacteria. The work highlighted the fact that the studied group had a significantly higher positivity rate of digestive pathogens in the stool by molecular methods compared to the classical methods performed. In addition, using PCR methods we can detect pathogens for which classical methods are not available, such as sapovirus, astrovirus.

Keywords: RT-PCR

OP. 8.20 Case study: Multidrug Resistance for Klebsiella Oxytoca in Recurrent Urinary Tract Infection in a Child with spina bifida and neurogenic bladder dysfunction

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Abstract

Introduction Urinary tract infection (UTI) represents the most frequent and problematic nephrological condition and the most common and serious infectious disease encountered in paediatric practice. UTI`s incidence and sequelae, as well as diagnostic and therapeutic conduct, vary greatly, depending on gender, age and comorbidities. Urinary tract infection are common among children with spina bifida and neurogenic bladder. This case study discusses the challenges in the management of recurrent UTI caused by multidrug-resistant Klebsiella oxytoca in an 6th –month-old girl with spina bifida and neurogenic bladder dysfunction. **Material and Methods** An 6th –month-old girl with a medical history of spina bifida and neurogenic bladder dysfunction presenting with recurrent UTI`s caused by Klebsiella oxytoca was included in this case study. Urine samples were collected and sent for culture and sensitivity testing. Identification of the causative agent and determination of antibiotic susceptibility were performed using standard microbiological techniques.
Results Urine culture identified Klebsiella oxytoca as the causative agent. Multidrug resistance was observed in Klebsiella oxytoca, limiting antibiotic treatment.**Conclusion** The case study illustrates the challenges in managing recurrent urinary tract infection caused by multidrug-resistant Klebsiella oxytoca in child with spina bifida and neurogenic dysfunction.

Keywords: urinary tract infection, Klebsiella oxytoca, multidrug-resistance

OP. 8.21 Management Strategies for Peri-Prosthetic and Peri-Implant Tissue in the Context of Insulin-Dependent Diabetes Mellitus

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Abstract

Background: The management of peri-prosthetic and peri-implant tissues in patients with insulin-dependent diabetes mellitus (IDDM) presents a formidable challenge in contemporary dental practice due to the deleterious effects of IDDM on tissue healing and integration processes. Understanding the altered tissue responses in this patient population is imperative for optimizing clinical outcomes. **Methods**: This study aimed to assess the histological and immunohistochemical characteristics of peri-prosthetic and peri-implant tissues in IDDM patients. A comparative analysis was conducted between tissues harvested from IDDM patients and non-diabetic controls. Parameters evaluated included inflammation, angiogenesis, and specific cellular markers indicative of dysfunctional healing processes in IDDM. **Results**: Our findings revealed significant alterations in the healing and tissue integration processes in IDDM patients, characterized by heightened inflammation, impaired angiogenesis, and endothelial dysfunction. These pathological changes contribute to the increased failure rates observed in prosthetic and dental implant procedures among diabetic individuals. **Conclusion**: Personalized management approaches are essential in the dental care of IDDM patients. Identification of specific pathological markers associated with IDDM enables the development of targeted therapeutic strategies, such as optimizing surgical protocols and meticulous material selection, with the aim of enhancing clinical outcomes in dental prosthetics and implantology. This presentation offers a scientific foundation for innovative therapeutic interventions in the management of IDDM patients, fostering more effective and individualized care that holds promise for significantly improving oral health outcomes.

OP. 8.22 Neurologic Complications of Viral Respiratory Infections detected by PCR Method in children

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Abstract

Introduction: Respiratory infections in children can sometimes lead to neurological complications, which, while rare, are serious and can impact long-term health. This article reviews recent studies that have used PCR (polymerase chain reaction) to detect such complications, aiming to enhance our understanding of the link between viral infections and neurological outcomes in the pediatric population. **Material and method:** This synthesis is based on research from scientific databases like PubMed, focusing on children with viral respiratory infections and neurological symptoms. Studies selected for review utilized PCR for viral detection. **Results:** Research shows a variety of viruses, like influenza and RSV, can lead to neurological issues. PCR is critical in. identifying these viruses influencing both treatment and outcomes. The challenge is distinguishing if symptoms are from the infection itself or a post-infectious response. **Conclusions:** PCR is invaluable for diagnosing viral causes of neurological complications in children, though the exact relationship between these viruses and neurological damage is still unclear. Findings highlight the importance of continued research and development of both diagnostic methods and treatment strategies.

Keywords: viral respiratory infections, PCR, neurological complications

OP. 8.23 The Incidence and Immunological Diagnosis of Celiac Disease in Children

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Abstract:

Aims: Diagnosing celiac disease in children presents various challenges for pediatricians in the various clinical stages. Thus, the diagnosis of cases increased significantly, although children did not always present symptoms or clinical signs of the disease. In support of the diagnosis, several factors come into play: screening, serological tests, awareness of the presence of celiac disease and the factors that favor its occurrence.

Material and methods: We performed a retrospective study at the Pediatric Clinical Hospital "St. Ioan " Galati between January 1, 2014 and October 2022. In this study we included 2640 children with suggestive symptoms of celiac disease.

Results: A number of 102 patients were diagnosed with celiac disease, recurrent abdominal pain being the most common symptom.

Conclusions: Early diagnosis is a decisive factor in the treatment and evolution of celiac disease with a good psychological contribution for parents.

Keywords: recurrent abdominal pain, celiac disease, child

OP. 8.24 Temporal Trends and Characteristics of Healthcare-Associated Infections at the Children's Hospital in Galați: A Retrospective Analysis

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Abstract

Healthcare-associated infections (HAIs) represent a significant burden on the global healthcare system, contributing substantially to morbidity, mortality, and financial costs. This retrospective analysis investigates the frequency and temporal trends of HAIs at the Children's Hospital of Galați between 2020 and 2023. Of the total 50 cases recorded during this period (49 pediatric cases and 1 case involving a caregiver), the majority were nosocomially acquired and identified passively (72%). The highest incidence was observed in 2022 (48%), followed by 2023 (24%), 2021 (20%), and 2020 (8%). Notable demographic characteristics include a male predominance (70%) and a peak occurrence in the 1-5 age group (60%). Pathogenic agents implicated varied, with *Rotavirus* (36%) and *Clostridium difficile* (26%) being predominant, while *SARS-CoV-2*, *Klebsiella pneumoniae*, *Norovirus*, *Influenza A*, and others contributed to a lesser extent. Although most pathogens did not exhibit a specific resistance profile, it is noteworthy that no cases of methicillin-resistant *Staphylococcus aureus* were identified in this analysis. The conclusions drawn from this analysis provide valuable insights for the implementation and adaptation of HAI prevention measures at the Children's Hospital of Galați, serving as a springboard for future investigations and interventions in this critical domain of public health.

Keywords: HAIs, pediatric epidemiology, nosocomial pathogens.

OP. 8.25 Viral etiology of acute respiratory infections in young children

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Abstract

Introduction: There are many pathogens which can cause respiratory tract infections in children under 5 years old leading to severe morbidity and mortality. The aim of this study is to analyze the profile of pathogens involved in respiratory tract infections in young children admitted with respiratory symptoms to the Emergency Clinical Hospital for Children "Sf Ioan" Galati. **Material and Methods**: The study was conducted on 523 children aged between 0 and 5 years old, from September 2022 to October 2023, in which multiplex PCR panels were performed for the simultaneous identification of 12 viruses and 7 respiratory bacteria. **Results**: Children under 12 months were more vulnerable to respiratory viruses, the most widespread being human rhinovirus A/B/C, respectively respiratory syncytial virus. **Conclusions**: Rapid early identification of viruses and fastidious bacteria by PCR can help start appropriate therapy timely and prevent antibiotic abuse.

Keywords: pathogens, respiratory infections, multiplex PCR panels

OP. 8.26 Shear test for two dental materials: BioMTA+ and TheraCal LC

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Abstract

Introduction: Due to the simplicity of the test procedures, the shear test is considered one of the most commonly used methods of measuring the strength of a link, and the results of its measurement under various conditions are reported in the scientific literature.

Material and Methods: Twenty-four adhesive surfaces were investigated, 12 samples for each material sampled in the study. Human permanent teeth, including wisdom molars, without any indication of conservative treatment, were harvested by extraction from patients aged 16 to 40 years. The teeth had no dental caries in the enamel and the enamel was of normal appearance with no mineralization defects, decalcification or cracks.

Results: The results of the present study suggest that TheraCal has superior dentin bonding properties to BioMTA. Further research is needed to investigate how these two materials achieve adhesion to the dentin surface (e.g. surface morphological analysis).

Conclusions: Despite the limitations of the shear test, the ease of sample preparation, minimal laboratory equipment required, lower incidence of pre-test failure, ease of sample alignment with the loading device and overall non-technical sensitivity make it a widely used method for assessing dentin adhesion

Keywords: shear test, dental adhedion, TheraCal, MTA

OP. 8.27 Oral lichenoid lesions associated with dental amalgam

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Abstract

Introduction: Dental amalgam has been used as a dental restoration for more than 150 years. However, some patients with these restorations may present oral lichenoid lesions (OLL)

Material and Methods: Two clinical cases were diagnosed as related to OLL. The treatment involved replacing the amalgam restorations by composite. A complete remission of the painful symptoms was observed after few days in one case and after one month in the other, although the lesions in the oral mucosa did not disappear completely

Results: The results of the present case review suggest that changing amalgam fillings with composite is indicated and with satisfactory results

Conclusions: Dentists should be aware of OLL occurrence close to amalgam restorations and should be able to diagnose it and recommend the best treatment option.

Keywords: dental amalgam, lichenoid lesions, dental composite

OP. 8.28 Osteoporosis, a risk factor in lumbar disc herniation

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Introduction:

Spinal pain is widespread in human society, affecting people of all ages, economic status and ethnic origin. Lumbar spinalgia currently has a prevalence of between 60 and 80% in the general population and is the second most common medical symptom in neurosurgical services and the second most common reason for seeking medical care and physiotherapy rehabilitation. The intervertebral disc begins to show signs of degeneration as early as age 30. Studies show that spinal pain affects about 85% of adults, but only 20% of cases develop true spinal pathology. Its incidence increases with age, males are more exposed, but women between 40 and 60 are also frequently affected, because bone demineralisation leads to osteoporosis, which plays an aggravating role in lumbar disc herniation.

Material and method: We aimed to conduct a retrospective study on patients with lumbar disc pathology admitted between 2022-2023, in the Emergency Clinical Hospital "Prof. Dr. Nicolae Oblu" in Iasi, a university hospital with neurosurgical profile, unique in the north-eastern area of Romania. Our aim was to quantify the influence of osteoporosis in the evolution of lumbar disc herniation. Statistical-mathematical methods were used to interpret the results, with the calculation of the frequencies of various demographic variables, characteristic of the study group.

Results: The study reveals that out of the total group of 1969 patients admitted for lumbar disc herniation, 149 (7,86%) had osteoporosis, evidenced by radiological examinations. The majority of patients with osteoporosis were female, aged 41-60 years. Osteoporosis was often associated with obesity. The most affected professions were drivers, civil servants, dentists, commercial workers. Recovery is more difficult in patients with osteoporosis, as drug treatment must be combined with physiotherapy.

Conclusions: Our study draws attention to the fact that osteoporosis is a trigger factor that influences the developmental profile of lumbar disc pathology, with an unfavourable influence on the quality of life of these patients.

Keywords: lumbar disc herniation, osteoporosis, neurosurgery, recovery.

OP. 8.29 Catatonia in patients with Dementia. The importance of biomarkers in the early treatment

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Abstract

Catatonia can occur in a variety of neuropsychiatric disorders, but also is a part of a clinical picture of almost all types of dementia, in some cases it can even be the initial symptom.

Catatonia is a severe neuropsychiatric syndrome characterized by a combination of speech impairment, posture, increased muscle tension, behavioral and emotional abnormalities caused by a variety of psychiatric, neurological and general medical conditions or secondary to drug usage or abuse.

In the last decade there were several studies for catatonic symptoms in older patients and also in those with dementia, without any notable results, catatonia remaining in most cases underdiagnosed.

Biomarkers to detect catatonic signs in older adults with dementia offer the opportunity to objectively differentiate the various types of catatonia, using easy screening methods in general practice, and also to rapidly treat the secondary problems that frequently appear like pneumonia, malnutrition, dehydration or sistemic sepsis.

The purpouse of this presentation is to synthesize useful biomarkers for an early diagnosis and treatment of catatonia in dementia pacients, in order to avoid serious complications.

Keywords: Catatonia, effects and consequences, dementia, older adults, biomarkers

OP. 8.30 Measles Evolution In The Galati County In The 2012-2023 Period

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Abstract

Measles is an acute viral illness characterized by a prodrome of fever and malaise, cough, coryza and conjunctivitis associated with high morbidity and mortality in young children. In the 2012-2023 period, Romania and, implicitly, Galati County went through 2 distinct epidemic phases for measles, the latter still being in progress. The Galati County has been moderately affected with the highest incidence recorded in 2018 at 18%000 and 1 death only as a result of the disease making up for 1.5% of total deaths caused by measles in Romania in the 2016-2018 period. In 2020, COVID-19 affected the measles case distribution by prematurely suppressing new cases which, coupled with a low MMR vaccine coverage, led to a new epidemic phase less than 2 years after. COVID-19 also negatively impacted the public trust in the vaccines, leading to some of the lowest vaccination rated recorded for MMR, Galati County being of the lower side with a 77.1% MMR coverage for 12-month and 68.5% for the second dose at 5 years old in 2023. In conclusion, measles remains a high morbidity disease which could be prevented by vaccination, which is the direction we should focus most on.

Keywords: measles, vaccination, MMR, COVID-19

PP. 8.31 Control of health risk associated with occupational exposure to ionizing radiation (PhD project)

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Abstract

The purpose of the study is to assess the health status of those professionally exposed to ionizing radiations, with the development of measures to control the radiation risk for health at workplaces. To achieve the goal, the following research is carried out: analysis of the structure of morbidity, including oncological diseases, and detection of the diseases that prevail among the personnel involved in the activities with RI; analysis of individual effective doses in the subjects included in the dynamic study for the period 2023-2026; elaboration of measures to control the risk to which personnel are exposed (elaboration of appropriate radiation protection measures) with proposals for the elaboration of a Register of personnel professionally exposed to IR jointly with ANRANR specialists. **Material and methods:** The investigated persons - professionally exposed to ionizing radiation from the medical field - work within the IMSP Oncological Institute in the Medical Imaging, Computed Tomography and Ultrasound Service, Radiogynecology, Radiotherapy, etc. sections. The health status of the specialists will be assessed according to the results of the medical examinations. The results of investigations of clinical/paraclinical indicators in dynamics will be analyzed. A cohort, analytical, descriptive, comparative study will be carried out, in which hygienic, epidemiological and statistical study methods will be applied based on the STATISTICA 10, Epiinfo, Excel and SPSS computer programs. **Expected results:** Monitoring of the annual average individual effective doses of those professionally exposed to ionizing radiation during the period y.y. 2023-2027; Detecting and analyzing cases of over-irradiation of professionally exposed personnel exceeding the maximum allowed dose (20 mSv/year) according to the national norms of Radioprotection; Determination of the radiation dose rate in the air from the offices equipped with radiological devices; The hygienic criteria for evaluation and classification of working conditions in the activities of using sources of ionizing radiation will be substantiated"; In collaboration with the specialists from practice and from ANRANR, the Register of Professional Exposures to RI will be developed.

Keywords: health risk, occupational exposure, ionizing radiation

PP. 8.32 A rare mesenchymal tumour of the peritoneum

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Abstract

Introduction

Solitary fibrous tumour (SFT) is a rare soft tissue tumour which belongs to the fibroblastic/myofibroblastic family of tumours. Originally thought to be limited to mesothelial-lined surfaces, SFT has now been reported in numerous extrathoracic sites.

Material and method

Our paper presents a case report of a solitary fibrous tumour with unusual localization and clinical manifestations and also a brief review of literature.

Results

A young woman with non-contributory medical history presented to the emergency room with intense pain in the right lower abdominal quadrant. An abdominal ultrasound revealed a micropolycystic structure situated posteriorly to the uterus. During the surgical procedure, extensive hemoperitoneum was detected and drained, revealing a mass located in the Douglas pouch, which was excised and sent for histopathologic examination. Our diagnosis, after immunohistochemical (IHC) assay, was peritoneal SFT, with low malignancy grade.

From the review of literature, the key point is that IHC is the key to diagnosis for this entity and without some specific markers, such as STAT6, BCL2 and CD34, it is impossible to differentiate it from other tumours with similar aspects in optical microscopy. Also, the alternative risk stratification systems are presented, with focus on the prognostic value of Ki67 proliferation index.

Conclusion

A rare and mostly benign soft tissue tumour, SFT is frequently discovered by mistake because it doesn't exhibit any symptoms. Although they can manifest anywhere on the body, the most frequent SFTs occur in the pleura, a peritoneal localization being rare and unusual.

Keywords: solitary fibrous tumour, immunohistochemistry, risk stratification systems, Ki67.

PP. 8.33 The role of physiotherapy in improving anthropometric parameters in prepubertal children with scoliosis

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Abstract

Idiopathic scoliosis in children involves lateral curvature and rotation, impacting trunk morphology, spine integrity, and thoracic development, necessitating vigilant monitoring during management. This study aimed to assess a novel physical therapy's effectiveness in improving anthropometric parameters in pediatric idiopathic scoliosis. The study conducted a thorough evaluation of several variables, including weight, height, BMI, resting thoracic perimeter (RTP), inspiratory thoracic perimeter (ITP), expiratory thoracic perimeter (ETP), and cirtometric index (CI). This assessment was performed on a cohort of 48 participants aged 8 to 12 years, who were randomly assigned to experimental and control groups. During the study, the experimental group underwent a six-month physical therapy-based rehabilitation program, contrasting with the control group, which received no intervention. Both groups underwent pre-, mid-, and post-intervention assessments, involving standardized clinical and morpho-functional evaluations at three successive time points. Statistical analysis employed two-way repeated measures ANOVA to assess the effects of group allocation and time on each dependent variable, while also examining their interaction. Mauchly's sphericity test confirmed assumption adherence, with Greenhouse-Geisser correction for violations. Post-hoc Bonferroni tests scrutinized pairwise differences between time points. Effect size (η^2) calculations quantified observed disparities, aiding in practical significance interpretation. Significant differences in RTP, ITP, ETP, and CI were observed between the experimental and control groups ($p \leq 0.001$), indicating the intervention's impact on spinal deformity-related parameters. Interactions between time and group factors were significant, with post-hoc analyses revealing differences across initial, intermediary, and final time points, emphasizing the intervention's dynamic effects over time. The study highlights the effectiveness of personalized physical therapy in improving thoracic function in pediatric spinal deformities, offering a promising management approach for scoliosis in this population.

Keywords: pediatric patients, spinal deformity, physical exercise, clinical outcomes.

SECTION 9
RECENT PRACTICES IN MEDICAL RESEARCH

Plenary invited speaker

Inflammatory Skin Diseases: Correlations Between Clinical Features and Microbiome Changes

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Marius-Anton Ionescu, MD, PhD
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Abstract
The skin microbiome is a complex ecosystem of skin's protective microbial communities whose imbalance can induce changes within the "interactomes" host-microbes (1-4). Microbiome's changes are linked to complex mechanisms leading to triggering or to aggravation of chronic inflammatory skin diseases as atopic dermatitis, psoriasis, acne, and others (5-7). The learning objectives of this lecture is to make an update on skin's microbiome changes in common inflammatory diseases of the skin as acne and atopic dermatitis and present recent results on normalizing skin microbiome in these diseases with the good clinical outcome significantly correlated to microbiome's improvement.

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OP.9.1. Thrombosis of the left renal artery during COVID-19 - Clinical case presentation and literature review.

Corina Popazu Rîșcă [a]*, Alina Lescai [a], Violeta Diana Oprea [a], Alice Laura Bocancia [a], Mihai Cristian Marinescu [a], Sorina Nicoleta Munteanu [a], Claudiu Elisei Tănase [a], Aurelia Romila [a]

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The presenting author: Corina Popazu Rîșcă

Abstract

Introduction: The infection with a new type of coronavirus surprised by the variety of its clinical manifestation. The disease can be asymptomatic, with only mild symptoms in the form of olfactory disturbances, general weakness or flu-like symptoms. On the other hand, in some patients the infection with COVID-19 can be severe, hypercoagulation being a common finding, with vascular endothelial damage and the consequent risk of venous and arterial thrombotic complications. **Material and method**: Starting from the clinical case of an old hypertensive patient presenting in the Emergency Room- then admitted to the Internal Medicine Department of the "Sf. Ap. Andrei" Clinical Emergency County Hospital in Galati, we present a brief literature review on arterial thrombosis during COVID-19. **Results:** An 83 years old female patient, previously known with hypertension and obesity, is admitted to our clinic after presenting with fever, lower abdominal pain, arrhythmia. During the week before she was treated at home for COVID-19. Her lab tests are suggestive of inflammatory syndrome and a urinary infection. Abdomino- pelvic CT reveals complete left renal artery thrombosis. It is worth noting the multiple reports of infection with SARS-CoV-2, and the association of deep venous thrombosis and in certain cases of pulmonary thromboembolism. Cheruiyot, et al. presents an incidence of thromboembolic complications of 2.7% to 8% of patients admitted to intensive care units with SARS COV 2 infection. The distribution of arterial involvement in the extremities was 39%, without describing its extent and involvement. Arterial thrombosis was accompanied by comorbidities such as hypertension, cardiovascular disease, atrial fibrillation, chronic kidney disease, among others. The reported mortality was 19.2% (10 of 52 patients). **Conclusions:** Although the state of hypercoagulation in the context of SARS COV2 infection tends to correlate with the severity of the disease, we must bear in mind that there may be thrombotic complications in patients with a mild form of it. Renal infarction is rare, presenting similar forms to common conditions such as nephrolithiasis and pyelonephritis, often not diagnosed or diagnosed late.

Keywords: renal artery thrombosis, hypercoagulability, COVID-19.

Fig. 1: Abdomino-pelvic CT showing left renal artery thrombosis.

OP.9.2. Early depressive manifestations in Alzheimer's disease patients: prodromal occurrence or related etiopathogeny?

Violeta Diana Oprea [a]*, Alina Lescai [a], Fabiola Sârbu [a], Corina Popazu Rîșcă [a], Alice Laura Bocancia [a], Mihai Cristian Marinescu [a], Sorina Nicoleta Munteanu [a], Claudiu Elisei Tănase [a], Andrei Lucian Zaharia [a], Mihaela Lungu [a], Aurelia Romila [a]

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The presenting author: Violeta Diana Oprea

Abstract

Introduction: There is substantiation from recent clinical studies demonstrating that both depression and dementia exhibit similar neurobiological changes, such as white matter disease, suggesting either shared risk factors or shared pattern of neuronal damage. Various biomarkers that can be assessed by neuroimaging or laboratory testing of biological samples, such as functional impairment, neuronal loss and protein deposition, were previously compared. **Material and method**: The present retrospective study is designed to analyze the relevant demographic and clinical parameters of depression in a study group of 103 patients aged >60 years (35 men and 78 women, mean age -74.77 years), hospitalized within a period of 9 years (2013- 2021) in two centers: 'Elisabeta Doamna' Psychiatric Hospital of Galati and in the Geriatric Clinic 'St. Apostle Andrei' Clinical Emergency County Hospital in Galati. These patients were diagnosed with Alzheimer Disease (AD) during the follow-up period and initially diagnosed with depression, using the definitions of DSM-5. The present study aimed at validating the hypothesis of the link between early depression and consecutive dementia, providing an in-depth analysis of the correlations between relevant clinical parameters measured comparatively at baseline when depression was diagnosed and later in life when AD was diagnosed. **Results:** From the perspective of depressive symptoms onset, for the majority of patients this occurred <5 years before their AD diagnosis. These patients were frequently admitted to hospital multiple times in between the date of first depression onset and AD diagnosis, 50.5% of whom being hospitalized ≥5 times for various psycho-neurocognitive complaints. A strong correlation was identified between the duration from the onset of depression to dementia diagnosis and the value of the MMSE score (Mini Mental State Evaluation) at the moment of depression diagnosis. The onset of the first depressive episode was found to correlate with the year of dementia diagnosis, suggesting an earlier onset of dementia if the depression onset was also earlier. Independent paired t-test between the patient subgroups with or without a certain clinical feature at the moment of AD diagnosis revealed significantly lower MMSE scores in patients presenting with aphasia, agnosia, temporal-spatial disorientation, apraxia, psychomotor agitation and hallucinations. A significant association of sex with cerebral abnormalities identified by native CT-scan/MRI at the moment of dementia diagnosis was found:

more women than men (69.1% vs 51.4%) had both cortical and subcortical generalized atrophy. **Conclusions:** The results of the present comprehensive analysis on the association between AD dementia and early-manifesting depression in elderly hospitalized patients support the idea of standardizing a clinical assessment protocol for evaluating the cognitive dysfunction in all patients with depression and monitoring their progress as they age. Since effective treatment methods for AD dementia remain scarce, patients would benefit from the clinicians' preventive approach using the identification of high-risk individuals and potentially modifiable risk factors, namely depression.

Keywords: Alzheimer's disease, dementia, depression, cognitive function, cerebral imaging, etiopathogenic mechanisms.

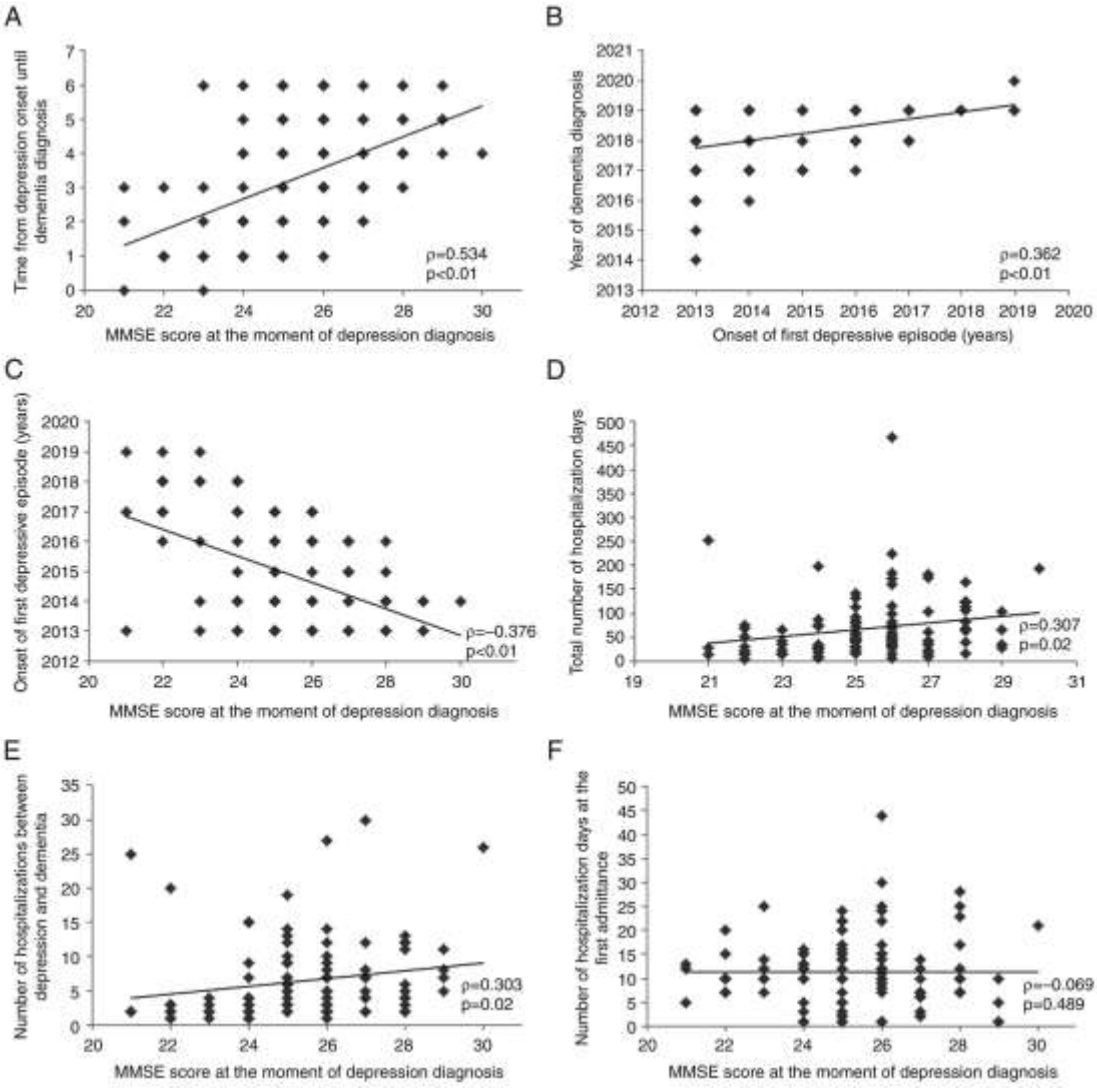

Fig.1. Graphical representation of the correlation between variables. (A) Time from depression onset until dementia diagnosis. (B) Years of dementia diagnosis. (C) Onset of first depressive episode. (D) Total number of hospitalization days. (E) Number of hospitalizations between depression and dementia. (F) Number of hospitalization days at the first admittance.

OP.9.3. The interplay between cardiovascular pathology and neurocognitive deficit in geriatric patients

Violeta Diana Oprea [a]*, Alina Lescai [a], Fabiola Sârbu [a], Corina Popazu Rîșcă [a], Alice Laura Bocancia [a], Mihai Cristian Marinescu [a], Sorina Nicoleta Munteanu [a], Claudiu Elisei Tănase [a], Andrei Lucian Zaharia [a], Mihaela Lungu [a], Aurelia Romila [a]

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The presenting author: Violeta Diana Oprea

Abstract

Introduction: The association between the onset of cardiovascular disease (CVD) and cognitive impairment in elderly patients through the so-called heart–brain continuum hypothesis has been extensively investigated in recent years. It is well known that both genetic and environmental factors play a role in cognitive aging as well as in related cardiovascular health. **Material and method**: We performed a review of the relevant scientific literature published in the last 5 years (2019-2024), based on the selected keywords. **Results:** The CVD impairs cognitive function through the activation of chronic inflammatory and thrombotic state, cardiac and vascular endothelial dysfunction. Conversely, the cognitive decline may worsen the status of CVD through lack of compliance for therapy, poor nutritional status, and limited physical and social activities. Data from the Emory Twins Study provides new evidence that the relationship between cardiovascular status and cognition in a middle-aged sample of cognitively normal people is in large part explained by early environmental factors. Brain imaging studies comparing patients suffering from heart failure with age-matched healthy participants showed cerebral structural changes: global cortical thinning in the frontal, parietal, temporal, and occipital lobes; hippocampal atrophy; and altered resting states in neural networks which are areas related to short- and medium-term memory and cognitive processes. **Conclusions:** All scientific research papers suggest a role of metabolic and vascular damage in the etiology of dementia. We found strong evidence that early stage targeting of shared modifiable risk factors can be most effective in curbing both heart disease and dementia epidemics.

Keywords: cardiovascular disease, dementia, cognitive impairment, etiopathogenic mechanisms.

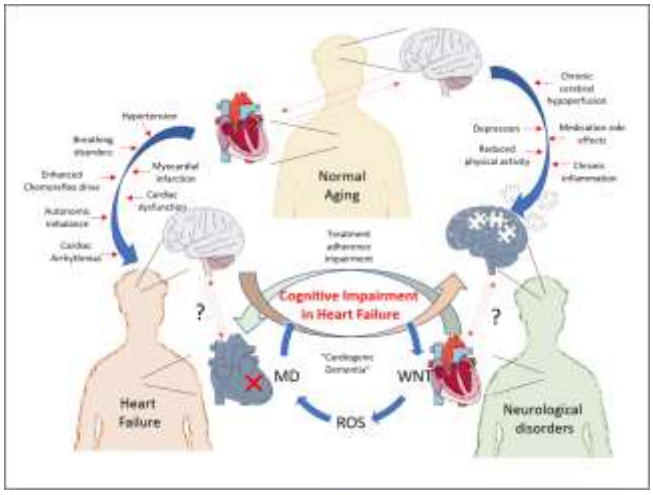

Fig. 1. Neurocognitive disorders in heart failure: oxidative stress, alterations in Wnt signaling, and mitochondrial dysfunction are all well-known molecular scaffolds that participate in cognitive function impairment.

OP.9.4. Salivary Antioxidant Biomarkers and Oral Health Dynamics in Young Athletes: An Insight into Competitive Sports' Impact

Paul Șerban Popa [a*], Mădălina Nicoleta Matei [b]

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Abstract

Introduction The intersection of competitive sports, oral health, and oxidative stress dynamics presents a nuanced domain within pediatric health research. This study focuses on how salivary oxidative stress biomarkers can indicate oral health status in children who participate in competitive sports. These biomarkers include glutathione peroxidase (GPX), total antioxidant capacity (TAC), and superoxide dismutase (SOD). **Materials and Methods** A cohort of 173 children was selected for this study, divided into three groups: hockey players, football players, and a non-athletic control group. The research examined the levels of GPX, TAC, and SOD in the saliva of these participants and analyzed their correlation with various dental health indices. These indices included oral hygiene, dental caries, and periodontal health, providing a comprehensive view of each child's oral health. **Results** The initial findings highlighted a significant increase in GPX and TAC levels among the athletes, suggesting a strong antioxidative response possibly triggered by regular physical activity. In contrast, SOD levels decreased across these athletic groups, indicating complex oxidative dynamics within the athletes' oral environments. Additionally, children engaged in sports showed better overall oral health metrics compared to the non-athletic group, pointing to a beneficial impact of sports on dental health. **Conclusion** This study underscores the vital role of salivary biomarkers in assessing oxidative stress and its implications for oral health among pediatric athletes. The results contribute to the ongoing discussion about the multifaceted effects of sports on health and support the integration of sports-based interventions in oral health strategies. This approach aligns with the move towards personalized pediatric healthcare, promoting overall well-being in young athletes.

Keywords: Pediatric Sports Medicine, Salivary Oxidative Stress, Oral Health in Athletes, Glutathione Peroxidase (GPX), Total Antioxidant Capacity (TAC), Superoxide Dismutase (SOD), Dental Caries and Periodontal Health, Non-Invasive Biomarkers, Physical Activity and Oxidative Stress, Preventive Dental Care Strategies

OP.9.5. Carbohydrate Antigen 125 (CA 125): A Novel Biomarker in Acute Heart Failure

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The presenting author: Mihai Cristian Marinescu

Abstract

Background: Heart failure is a global major healthcare problem with millions of hospitalizations annually and with a very high mortality. There is an increased interest in finding new and reliable biomarkers for the diagnostic, prognostic and therapeutic guidance of patients hospitalized for acute heart failure; Our review aims to summarize in an easy-to-follow flow recent relevant research evaluating the possible use and the clinical value of measuring CA 125 serum levels in acute HF. **Methods**: A thorough search in the main international databases identified a relevant pool of 170 articles, providing recently published data for this narrative review that used PRISMA guidelines. **Results**: There are data to sustain the role of carbohydrate antigen 125 (CA 125), a worldwide used marker of ovarian cancer, in patients with heart failure. Several studies have shown links between CA 125 levels and congestion seen in acute heart failure, high mortality and readmission rates at 6 months follow-up after discharge from acute heart failure and also a role of CA 125 in the guidance of heart failure therapy. There are also clinical trials that showed that several particularities of CA 125 make it even better than N-terminal pro b-type natriuretic peptide (NT-pro BNP)—a classical and more utilized marker of heart failure) in several scenarios of acute heart failure. **Conclusions**: Although the mechanism behind the upregulation of serum CA125 in patients with congestive HF has not been confirmed nor fully understood.

Keywords:acute heart failure; carbohydrate antigen 125; CA 125; N-terminal pro b-type natriuretic peptide; NT-pro BNP; congestive heart failure

OP.9.6. Importance of biomarkers in liver diseases

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Abstract

INTRODUCTION: The excessive consumption of alcohol is a global healthcare problem. That kind of habit produces a wide spectrum of hepatic lesions, the most characteristic of which are steatosis, hepatitis, and fibrosis/cirrhosis. In alcohol use disorder (AUD) patients, cessation of alco hol consumption is frequently associated with several clinical symptoms (tremor, nausea, anxiety, insomnia, etc.) that constitutes the alcohol withdrawal syndrome (AWS; American Psychiatric Association, 2013). The spectrum of alcohol withdrawal symptoms ranges from such minor symptoms as insomnia and tremulousness to severe complications such as withdrawal seizures and delirium tremens. Biomarkers to detect alcohol consumption or harmful alcohol use offer the opportunity to objectively verify the information about alcohol consumption provided by a patient or subject. MATERIAL AND METHODS: In our clinical case presentation, we studied a patient who came with abdominal pain, tremulousness, psychomotor agitation and hallucinations. REZULTS: We conducted a clinical and paraclinical evaluation that led us to the diagnoses of alcoholic hepatitis and delirium tremens. CONCLUSION: Therefore in this presentation, we aim to emphasize the importance of making a quick diagnosis and the necessity of a proper treatment in order to avoid serious complications.

Keywords: Alcohol consumption; alcohol effects and consequences, alcoholic liver disease, hepatic lesions, Biomarkers

OP.9.7. Prediction factors for survival, complications and quality of life at patients with complicated colonic cancer

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The presenting author: Adrian Silaghi

Abstract

Introduction: Colonic cancer represents the third most common cancer worldwide, 2.2 million of new cases are recorded every year and it is responsible for the death of 1 million of patients in 2020. In comparison with other malignant conditions, 5 year survival rates are higher, sometimes reaching 72%, for early stages. Regarding the complications of colonic cancer it is represented by occlusion, hemorrhage, invasion and perforation, which can lead to lower survival rates, a low quality of life index, high rates of local relapse, surgical and general complications. **Materials and methods:** This study is a retrospective one which includes patients hospitalized and treated in the general surgery department of St. Pantelimon Emergency Clinical Hospital between May 2020-April 2024 with complicated colonic cancer as a cause for acute abdomen. Using the medical records, surgical logbooks and integrated statistical system of the hospital data were obtained and processed with Microsoft Excel 2010 and SPSS Statistics. The quality of life was evaluated with EORTC QLG Core Questionnaire. **Results:** In this study 132 patients were enrolled, the most frequent form of presentation in our study group was the bowel obstruction 62,12% secondary to a left side tumor, lower rates of mortality was observed in this group in comparison with the patients with perforation. Regarding the short term survival (<30 days) organ failure and peritonitis were present in 43.18%. Patients with multiple organ failure had a mortality over 82.45% and with high risk of postoperative complications. Presence of postoperative complications were observed in 41.66% of patients. Quality of life index varied from 37 to 113

with a mean of 85.69. **Discussion:** In our study group, the most important factor for predicting the rates of mortality was the presence of multiple organ failure, secondary to sepsis or severe dehydration syndrome(in case of bowel obstruction) . Other factors responsible for enhancing the rates of mortality are the presence of distant metastases, anemia, diabetes and severe cardiac events. Regarding the postoperative complications, the contamination of the peritoneum can influence the rates of appearance of wound infections, hernias and increasing the time spent in ICU. One of the factors which can influence the quality of life of the patients with colonic cancer was the presence of a stoma and it's complications and prolonged bed immobilisations with high risk of pressure ulcers. **Conclusions:** The most frequent complication of colonic cancer is the bowel obstruction affecting in more than 80% the left side of the colon, the perforation of the large intestine can happen locally or at the caecum with high risk of mortality, complications and low quality of life. Early recognition of the disease via screening programs could potentially improve outcomes and enhance quality of life in this patient population.

OP.9.8. Reactive cutaneous-mucosal manifestations with allergic character post-medication

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Abstract

Introduction: In addition to the beneficial effects of a medicine on one or more affected organs, they can also cause Adverse Reactions, some of which are allergic , due to unfavorable effects that manifest on other healthy organs. **Materials:** A patient's response to medication can vary, depending on numerous factors, and the way they act in the body can differ, being influenced by certain genes. Throughout the oro-facial territory, a multitude of Adverse Reactions, potentially allergic to drugs, can be encountered, which can affect: teeth, lips, salivary glands, oral mucosa (lingual, jugal, gingival), taste receptors, innervation of the oro-facial region. Besides these, there is an Adverse Reaction with a lower frequency but important as clinical manifestations, called Gingival Hyperplasia. **Methods:** For establishing the diagnosis, for all three patients, we used: 1. Clinical examination; 2. Paraclinical tests - Lymphoblastic Transformation Test for drugs, the Narajo Score, for incriminated drugs, dosage of anti-drug IgE, samples of gingival tissues in order to obtain a histopathological examination, complete procedure. **Results :** The described histopathological aspects correspond to the diagnosis of Fibrous Hyperplasia. **Conclusions:** Although this work is still at the beginning, in progress, and cannot be generalized, we are confident that TTL, the Naranjo Score and tissue sampling for anatomical-pathological purposes, are necessary and useful diagnostic tools to establish a correlation between the administration of a medicine and the occurrence of sensitization reactions or allergies.

Keywords : Adverse Reactions, Hypertrophic Gingivitis, Lymphocyte Transformation Test, Drug Allergy

OP.9.9 The effect of ionization on the quality of life of children with hyperhidrosis

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The presenting author: Florentina Năstase

Abstract

Introduction: Primary hyperhidrosis (PH) is focal chronic autonomic skin disorder of unknown aetiology with onset in childhood or puberty. It is characterized by spontaneous excessive sweating resulted from overstimulation of the sympathetic nervous system, which disappear over sleep. **Material and method:** A complete medical history and physical examination provide all the necessary information to differentiate the two types of hyperhidrosis, secondary hyperhidrosis must be excluded prior. **Results:** Direct electrical curect administration is used as a therapeutic option for palmar or palmoplantar hyperhidrosis for more than 70 years. It should bu used prior to botulinum toxin injection or surgical intervention. Iontophoresis is the passing of an ionized substance through the skin by the application of the electrical current. An adequate treatment and an early diagnosis are essential for minimizing the physical, psychosocial and emotional effects. Social rejection and decrease self-esteem diminish the desire for real contact and interactions, leading to loneliness.

Keywords: hyperhidrosis, sweat, children, iontophoresis.

OP.9.10 Depression and anxiety - prodrome of cognitive disorders in geriatric patients with chronic kidney disease – Case report

Laura Alice Bocancia [a,b*], Violeta Diana Oprea [a,b] Sorina Nicoleta Munteanu [a,b], Mihai Cristian Marinescu [a,b], Corina Rișcă Popazu[a,b], Claudiu Elisei Tănase[a,c], Aurelia Romila[a,b]

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The presenting author: Laura Alice Bocancia

Abstract

Introduction*:* The health of the chronic patient depends on both the mental and physical state. Recently, a correlation has been observed between chronic kidney disease and depressive and anxious syndromes. The depression of the elderly was and remains one of the main problems of geriatrics both by its high prevalence, in a continuous increase, and by its severity. Chronic kidney disease is a very common clinical problem in elderly patients and is associated with increased morbidity and mortality. The elderly are particularly susceptible to kidney damage from age-related declines in glomerular filtration as well as kidney damage from chronic disease states such as diabetes mellitus, hypertension, glomerular, and tubulointerstitial disorders. Patients with chronic kidney disease become depressed and anxious once they understand the prognosis of the disease, therefore it is an alarm signal for the onset of cognitive decline in the elderly. **Material and methods***:* We present a case of a 74-year-old patient presented from an urban area with multiple cardiovascular diseases, chronic kidney disease and depression occurred after cardiac surgery. **Results and discussion***:* The patient come to the geriatrics and gerontology department of the Galati County Clinical Hospital for asthenia, nausea, temporal-spatial disorientation, depressive-anxious mood observed after cardiac interventions, osteoarticular pain. The analyzes performed showed us that the patient has increased urea and creatinine values, mild normocytic normochromic anemia and an increased glycosylated hemoglobin. During the hospitalization, the patient had an anxious episode leading to a lipothymia crisis when he was taken to an interclinic urology consultation. Anti-depressants were administered to the patient and also GH3 that it's known for his effect against depression. Although on the first day of hospitalization it was not obvious, paying more attention during the days of hospitalization, a cognitive deficit was also

observed, later revealed by the Global Geriatric Assessment. **Conclusions***:* To sum up, our case demonstrate there is a relation between chronic kidney disease and depression with anxious syndrome that can be a prodrome of cognitive disorders in elderly. We suggest that anxiety and depression may affect the patients' cognition and also the ability to control their conditions. As physicians we must treat depression and anxiety as seriously as we treat chronic diseases.

Keywords: depression, anxiety, geriatric, chronic kidney disease

OP.9.11 Factors associated with maternal morbidity in patients with eclampsia in three obstetric intensive care units: A retrospective study

Carolina Susanu[a*], Anamaria Harabor[a], Ingrid-Andrada Vasilache[b], Petronela Vicoveanu[c], and Alina-Mihaela Călin[a]

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The presenting author: Carolina Susanu

Abstract

(1) Introduction. Eclampsia is a rare complication that can occur during pregnancy, and has a significant impact over the maternal and neonatal outcomes. The aim of this study was to investigate the risk factors associated with significant maternal morbidity after an eclamptic seizure. **(2) Materials and Methods.** An observational retrospective study was performed in three maternity hospitals from Romania, between 2015 and 2023, and included pregnant patients diagnosed with eclampsia. Clinical and paraclinical data was investigated, and the impact of several risk factors has been assessed using multiple logistic regression analysis. The results were reported as risk ratios (RR) and 95%confidence intervals (Cis). **(3) Results.** A total of 23 patients who experienced eclamptic seizures have been included in this study, and 82.6% of them experienced a form of significant morbidity (stroke, PRES syndrome, or any organ failure/disfunction). Our regression analysis revealed that advanced maternal age (RR: 12.24 95%CI: 4.29–36.61, p=0.002), the presence of thrombotic disorders (RR: 9.17, 95%CI: 3.41–23.70, p=0.03), obesity (RR: 4.89, 95%CI: 0.78–18.15, p=0.036), and smoking status (RR: 2.18, 95%CI: 0.13- 6.51, p=0.042) significantly increases the risk of postpartum comorbidities.**(4) Conclusions:** Careful monitoring of pregnant patients, adequate weight control during pregnancy, and correct anticoagulation of individual patients could reduce the extent of postpartum comorbidities that can result from an eclamptic seizure.

Keywords: eclampsia, comorbidities, risk factors, postpartum.

OP.9.12 The Impact of COVID-19 on the Tuberculosis Features in a Romanian Pneumology Hospital

George-Cosmin Popovici [1,2], Manuela Arbune[3,4], Aurel Nechita[3,5]

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The presenting author: George-Cosmin Popovici

Introduction: The COVID-19 pandemic and tuberculosis have epidemiological similarities, being transmitted airborne, favored by direct contact, crowded environments and vulnerable biological status. **Methods**: We performed a retrospective study of 45 cases of pulmonary tuberculosis associated with COVID-19 (TB+COV+) compared to 45 cases with tuberculous monoinfection (TB+COV-), hospitalized during 2021-2022. **Results**: The demographic characteristics were similar in the two groups, predominating men, a median age of 51 years, living in rural areas, medium level of education and smoking. Common symptoms of the two groups were cough, weight loss, profuse sweating, loss of appetite and hemoptysis, while fever, headache, myo-arthralgias and digestive symptoms characterized the TB+COV+ forms. The scores of radiological lesions in the TB+COV+ compared to TB+COV- group were significantly higher and persistent, revealing more frequent bilateral extensive lung lesions. There were no significant differences in the biological parameters between the two groups. Mortality was 2.2%, regardless of the association of COVID-19. The frequency of infections with *Clostridioides difficile* was higher in TB+COV+ cases. **Conclusion:** The co-infection of COVID-19 had a mild impact on the clinical and biological expression of tuberculosis diagnosed in a pandemic context.

Keywords: tuberculosis; COVID-19 pandemic; co-infection; Romania

OP.9.13 Association Between Obstructive Sleep Apnea Risk and COVID-19 Severity: A Prospective Cohort Study in Romania

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The presenting author: George-Cosmin Popovici

Abstract Introduction: This study investigates the association between obstructive sleep apnea (OSA) risk and COVID-19 severity in patients not previously diagnosed with OSA. **Material and Methods:** Conducted at the Pulmonology Hospital in Galati, Romania, from 2021 to 2023, the research involved COVID-19 patients who were evaluated 6–8 weeks post-discharge using the Epworth Sleepiness Scale and the STOP-BANG questionnaire. Demographic and clinical data were sourced from electronic medical records.The study cohort consisted of 1410 hospitalized patients, with OSA risk detected in 257 individuals (18.2%). . **Results:** Patient demographics showed a prevalence of urban-dwelling males (66.5%), aged between 24 and 82 years (median 57.5 years), mostly with a middle school education level (51%), and a majority were non-smokers (57.2%) who abstained from alcohol (70.82%).The STOP-BANG scores ranged from 0 to 8, with a median score of 5. OSA risk stratification identified 59.92% at high risk, 33.07% at medium risk, and 7% at low risk. Severe OSA (AHI>30) was noted in 57.97% of patients, with moderate and mild forms in 30.35% and 10.89%, respectively. Among those recommended for APAP therapy, adherence was 57.14%. **Conclusions:** The findings indicate a significant correlation between high OSA risk and increased COVID-19 severity, suggesting that systematic OSA screening using the STOP-BANG and ESS questionnaires should be implemented for all COVID-19 patients upon hospital admission, especially for those with comorbidities. This approach could potentially mitigate the risk of severe COVID-19 outcomes and reduce hospitalization duration.

Keywords: SARS-CoV-2, polysomnography, obstructive sleep apnea

OP.9.14 AI (artificial intelligence) influences on the diagnosis and treatment of children with ASD

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Abstract

Introduction: This paper presents the possibility of using artificial intelligence in the diagnosis and treatment of ASD and can help autistic people to improve their social, communication and emotional skills.
Materials and methods: Collecting and synthesising information from a range of sources (articles, books and other relevant publications) this paper attempts to provide an overview of how AI might influence or limit the early detection of ASD as well as how new technologies help families, clinicians and children in the tedious and time-consuming process of assessment. Machine learning, fuzzy logic, natural language processing, neural networks and mobile apps are some methods that could help in the diagnosis and treatment of ASD.
Conclusions: AI can be an important therapeutic tool for people with ASD, providing them with personalised and targeted support, innovative ways of communicating and learning, helping the ASD patient to cope more easily in society and to reach their full potential.

Keywords: AI, ASD, diagnosis, treatment

OP.9.15 Oncological patients reactions in proposed treatment

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The presenting author: Elena Gabriela Vâlcu

Abstract

Introduction. This paper presents the researches on the how the neoplasm patients approach the recommended treatment, following the observation that there are patients who, under emotional influences, neglect or take breaks from the treatment. With the goal to investigate how the interaction between patient and medical personnel influences the behavior during treatment time, several statistical variables were defined. These ones target the motivation of the patient to follow the treatment with regularity, the reason of break the treatment and the involvement of the patient in treatment establishing. **Mixed method design**: Statistical methods using EpiInfo package and statistical methods, applied to a large database of patients with neoplasm diagnostic was proven that the interaction between medical adviser and patient can lead to different patients' behavior during the treatment. Based on these findings, can be identified the method to support the patient to respect the medical recommendations.

Results.

Frequency

TR5	Frequency	Percent	Fleiss 95% LCL	Fleiss 95% LCL	
Yes	198	62.26%	56.66%	67.57%	
No	120	37.74%	32.43%	43.34%	
TOTAL	318	100.00%			

Among the investigated oncology patients 62.26% stated that they constantly follow the prescribed drug treatment, while 32.43% claim that they have stopped the drug treatment.

In conclusion, The interaction between the patient and the medical setting can be described as a process and can be both facilitating and inhibiting the goal of treatment. When the patient is involved in choosing the most effective treatment taking into account the patient's quality of life, communication between doctor and patient takes on a fundamental role.

Keywords: neoplasm patients, treatment following, statistical methods.

OP.9.16 Early and intensive therapeutic research

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Abstract

Introduction: This article presents the case of a 33-year-old young diabetic patient with important clinical symptoms treated quickly and efficiently according to the new therapeutic guidelines. **Material and Methods**: The data was collected for one month period through clinical and paraclinical evaluation of the patient who was treated intensively . The treatment was systematic and complex. We used the latest treatment guidelines for this patient, recently diagnosed with diabetes, with mixed dyslipidemia and risk of acute and chronic complications. **Results**: This approach highlights some major aspects: the importance of personalized treatment, permanent collaboration with the patient to check the efficiency of the treatment, avoiding acute complications and hospitalization. **Conclusions**: This therapeutic approach according to the ADA and EASD 2023 consensus is important for this young patient , with a family history with high cardiovascular risk, in order to decrease the risk of MACE events and, also, to prolong the patient′s survival without micro and macrovascular complications.

Keywords: young diabetic patient, high cardiovascular risk, guidelines.

OP.9.17 Multidisciplinary approach to suicidal behavior in children and adolescents.

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The presenting author: Bratu Elena Alexandra

Abstract

Introduction: Suicidal ideation, self-harm behavior and suicide attempts are increasingly common among children and adolescents. According to WHO data, suicide is the fourth leading cause of death in the 15-19 age group. In this context of increasing suicidal behaviour, it is imperative to intervene quickly and effectively.
Material and Method. In this context, we present the case of a 13-year-old girl with several suicide attempts, who came to the emergency room. **Results**. She came with an overdose of pain killers last year and this year she ingested a foreign object. She is from a nonparental family, her father died, she faced bullying at school. We used the APS-SF scale to rate her mental and emotional state. The scale has 115 items, and it is a multidimensional measure of psychopathology and personality. Addresses issues regarding school safety by assessing excessive anger and propensity for violence toward others. Consists of 12 clinical scales and two validity scales. Six of the clinical scales focus on DSM-IV™ symptomatology associated with the following disorders: conduct disorder, oppositional defiant disorder, major depression, generalized anxiety disorder, posttraumatic stress disorder, and substance abuse disorder.
The patient searched on the Internet ways of harming herself and the social media, in the context of severe bullying and she found comfort in meeting other people like her online.
Conclusion: The patient state was a result of a multitude of factors, the psychosocial part can be tackled through multidisciplinary approach. The suicide attempt is reflected in the correct therapeutic management, from the recognition of early signs suggestive of such behaviour to crisis intervention techniques and relapse prevention.

Keywords: suicidal behaviour, multidisciplinary approach, intervention, prevention.

OP.9.18 The benefits of ''respite'' services on the psycho-emotional state of families of children admitted to the hospice: Preliminary study on parents' perceptions

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Introduction: In the field of palliative care for children, the term "respite" refers to a temporary break offered to primary caregivers of a child with a life-limiting illness. The aim of this study was to assess the perceptions of parents who have benefited from „respite" services within the Lumina Association, Bacău palliative care unit and the benefits it can bring in improving their psycho-emotional state. **Material and method**: The study consisted of a quantitative research involving 34 parents/caregivers who answered a questionnaire with 26 questions, and a qualitative research involving a focus group with 12 parents who had received respite services. **Results:** The use of respite services was associated with a significant reduction in psycho-emotional stress on the part of primary caregivers; 91% of respondents reported that this type of service reduced their level of psycho-emotional stress. **Conclusions:** All participants in the study confirmed that the most important benefit of respite care is the time gained to care for family and health. The development of respite services could reduce the risk of emotional exhaustion and mental health problems.

Keywords: palliative care, cancer, children, demographics, health care workers, life-threatening illness, respite.

OP.9.19 Clinical and biological features in HIV-positive patients with cancer

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Abstract

Introduction: When AIDS (acquired immunodeficiency syndrome) was established as a clinical syndrome, it was recognized that these patients were at risk of developing various types of neoplasia, including Kaposi's Sarcoma, various types of non-Hodgkin's lymphoma, and invasive cervical cancer. **Material and method:** We performed a retrospective analysis of patients diagnosed with HIV (human imunodeficiency virus) in the period 2018-2022 from Galati county, we considering clinical and biological data, collected at the initial stage and 12 months follow-up. Results: The study included 87 patients with HIV infection with a median age of 37.5 years [17;72], predominantly men 67%, smokers (71%). Many of them worked abroad (57%) and had multiple sexual partners (77%). 10 of the patients in the studied group presented neoplasias (11%), of which 6 patients with tumors from the spectrum of oncology, and 4 with hematological neoplasias. HHV-8 serological evaluation was available in 36 patients, with 22.22% testing positive. **Conclusions:** Persistent immune activation as a consequence of HIV infection can lead to chronic tissue damage and the formation of infection-induced microenvironments that potentiate cancer development.

Keywords: HIV, cancer, immune activation

OP.9.20 Demographic characteristics of patients admitted to the surgery department with cardiovascular pathology associated

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Abstract

Introduction: Cardiovascular diseases (CVD) are conditions of the heart and blood vessels. Atherosclerotic disease, especially coronary heart disease, is the leading cause of death worldwide, approximately 17.5 million annually. Currently in Europe, SCORE charts are used to estimate the cumulative risk at 10 years, in people who do not currently have atherosclerotic CVD, but have several risk factors. For the prevention of cardiovascular diseases, it is essential to control the risk factors, which are modifiable (smoking, hypertension, diabetes, obesity, dyslipidemia, sedentary lifestyle, etc.) and non-modifiable (age, gender, family history).

Material and methods: This study presents the demographic characteristics of patients admitted to the surgery department with associated cardiovascular pathology, between October 2022 and December 2023. A group of 70 patients admitted during this period to the Surgery II clinic of the "St. Apostle Andrei Galați".

Results: The common variables gathered in demographic research include age, gender, living environment, but also clinical data such as the reasons for admission, days since onset, associated comorbidities or consumption of toxic substances. A descriptive study of the group of patients was carried out with the help of the anamnesis and the study of personal medical documents.

Conclusions: From the analysis by age groups and gender, it was observed that male patients, in the decade of 70-79 years, are more frequently affected. An important percentage of the patients included in the study presented personal history of essential hypertension, followed by chronic kidney disease and diabetes.

Keywords: cardiovascular disease, surgery, demographics, risk factors

OP.9.21 Evaluation of mental health impact in patients with moderate and severe forms of COVID-19 in Galati county: a longitudinal case-control study

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Abstract

Introduction: Early in the pandemic, concerns were raised about the potential for severe and widespread neurological and psychiatric manifestations following COVID-19, based on systematic reviews of observational studies performed in patients infected during previous coronavirus epidemics. **Material and methods:** We carried out a prospective case-control study on cases with COVID-19 infection admitted between August 2020 and October 2021 in the II Clinic of the Hospital for Infectious Diseases "St. Cuv. Parascheva" Galati. Our main cohort consisted of patients diagnosed with COVID-19, and the control cohort included patients diagnosed with other non-COVID-19 respiratory infections, including influenza. Patients with a personal or family history of psychiatric disorders were excluded from both cohorts. The epidemiological, clinical, biological, and prognostic characteristics of the COVID-19 cases were analyzed and the data were compared with other published results. Psychiatric manifestations were assessed, using psychometric scales, at baseline and in the following 6 and 12 months. We estimated the incidence of 4 psychiatric symptoms after a confirmed diagnosis of COVID-19: dementia, depression, anxiety and insomnia; we investigated how these estimates were affected by the severity of COVID-19. **Results:** 179 patients were included in the study: 137 with SARS-CoV2 infection in the main cohort and 42 with non-COVID-19 infections in the control cohort. The incidence of psychiatric symptoms, at the initial evaluation, among the patients with COVID-19 was 24.81% cognitive deficit, 22.62% anxiety, 18.9% insomnia and 6.56% depressive mood. During the follow-up period, 10.21% showed cognitive deficit, 10.21% anxiety, 4.37% insomnia and 1.45% depression. **Conclusions:** Psychiatric morbidity in the 12 months after COVID-19 is influenced by age, sex, level of education and pre-existing medical disorders. Long-term post-COVID-19 survey is needed to clarify the evolution or reversibility of these mental disorders.

Keywords: COVID-19, mental health, infectious diseases, Galati county

OP.9.22 Palliative care stressors: analysis of impact on workers and post-pandemic COVID-19 conclusions

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Abstract

Introduction: Palliative care is an essential branch of modern medicine that aims to provide comfort and support to patients in the terminal phase of an incurable disease. The medical staff involved in these services often face high levels of stress due to the emotional and physical complexity of their work. This study aims to identify specific sources of stress and to explore the support needs of these professionals, also in the context of the challenges posed by the COVID-19 pandemic. **Materials and Methods:** We developed a structured questionnaire for staff in two children's palliative care centres and a group of adult palliative care workers to assess workers perceptions of sources of stress, the impact of the pandemic and their support needs in the workplace. The questionnaire was distributed online and included open and closed questions. Data analysis included descriptive statistical techniques and qualitative thematic analysis for open-ended comments. **Results:** The results indicated that high workload, emotional difficulties related to end-of-life care, patient death and interaction with families were the main sources of stress. The pandemic exacerbated these challenges, with most respondents reporting a significant increase in stress levels. There was a clear need for training in stress management, psychological counselling and better organisational support. **Conclusions:** The survey results highlight the importance of implementing proactive strategies to support the mental health of these professionals. By reviewing and adapting organisational policies to provide a more supportive working environment that recognises and responds appropriately to the specific challenges faced by palliative care staff, a significant contribution can be made to reducing work-related stress and improving the quality of work life of these workers, thereby ensuring optimal patient care.

Keywords: palliative care, occupational stress, health workers, COVID-19 pandemic, mental health, stress management

OP.9.23 *Klebsiella Pneumoniae* healthcare associated infections and microbial resistance

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Abstract

Introduction. Healthcare-associated infections (HAI) are currently an important public health problem, arising from medical practice and involving both patients and healthcare workers. Microbial resistance is a worrying and rapidly escalating phenomenon worldwide, with complex mechanisms and important involvement in the determinism of intra-hospital infections. Across Europe, it is estimated that 80,000 hospitalised patients have at least one intra-hospital infection every day with multi-antimicrobial resistant germs. In high-income countries, the prevalence is around 7.5%, and in low- and middle-income countries, the prevalence ranges from 5.7% to 19.2%. **Material and Methods.** A retrospective, descriptive epidemiological study, focusing on the aetiology and microbial resistance of the pathogens involved, was carried out at the Clinical Emergency Hospital "Prof. Dr. Nicolae Oblu" in Iași in 2020-2021, on the 602 identified and reported HAI. **Results.** The most frequent etiological agents of HAI identified in our study were Klebsiella pneumoniae (13.45%), Acinetobacter calcoaceticus (10.11%), S. aureus (8.45%), E. coli (7.62%), Pseudomonas aeruginosa (5.47%), showing the predominance of Gram-negative bacteria (GN) and the fact that they belon to the ESKAPE group of pathogens, with percentages similar to the European average. Klebsiella pneumoniae (13.45%) was the most common etiological agent in HAI, with a predominance in urinary tract infections, surgical incision infections or infections associated with pulmonary intubation, and its antimicrobial resistance was highlighted on the basis of antibiograms. **Conclusions.** The results of our research are comparable with data from the national and global literature for the neurosurgical profile. They draw attention to the phenomenon of microbial multiresistance to antibiotics, which is gaining momentum and to which physicians must be extremely vigilant and discerning. Our study provides useful data for monitoring the resistance of pathogens involved in HAI, as well as for guiding antibiotic therapy or implementing a set of measures related to antibiotic therapy and antibiotic prophylaxis in hospitals in the North-Eastern Region of Romania.

Keywords*:* healthcare associated infections, Klebsiella pneumoniae, microbial resistance, retrospective epidemiological study, neurosurgery

OP.9.24 Analysis of risk management for patient safety in Romanian healthcare organizations

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Abstract

Introduction: A risk assessment matrix is a valuable instrument for studying, assessing, and prioritizing risk management in patient safety evaluation. Our paper provides an overview of the essential variables, assets, limitations, robustness, and shortcomings of this instrument using the ISO 31000 risk management groundwork. **Materials & methods:** One of the most important phases in the patient safety management approach is risk assessment, which entails several tasks, including identifying and investigating all possible risks. In the research literature can be identified some techniques for evaluating potential dangers. The decision matrix risk assessment (DMRA) technique or risk matrix method, is a procedure that is employed to ascertain the level of risk, evaluate various risks, and identify which dangers require immediate attention. **Results:** Determining the scale of a risk entails comprehending the repercussions that might occur if that danger happens, to distinguish tolerable minor medical risks from those determined intolerable. Evaluating a risk by multiplying effects by likelihood is a basic method for assigning a numerical number to every risk. The risk matrix is an invaluable instrument for assessing the likelihood and severity of consequences, as well as deciding if the level of risk is extremely low or excessive. It also allows teammates to decide which risks should be handled immediately. Nevertheless, when conducting a risk evaluation, it is necessary to examine the assumptions that define the entire period, particularly the ones that influence the creation and usage of risk matrices. **Conclusions:** Risk assessment actors must deal with various issues, including choosing the best methodological approach, determining whether current precautions are suitable, expressing threat effect fields, describing harm effects, clarifying probability levels, and creating a risk matrix. We made several recommendations for dealing with these challenges, which are particularly important when healthcare providers give inadequate auspices on how to make use of risk matrices.

Keywords: risk assessment, healthcare, patient safety, risk management

OP.9.25 Retrospective of the Covid 19 pandemic on type 1 diabetes and other autoimmune diseases in children

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The presenting author: Maria Ursu

Abstract

Introduction: Understanding how the Covid pandemic is and will affect us in the future may happen gradually. This paper presents research on how the pandemics affected the new onset type 1 diabetes and other autoimmune diseases for children in Galati Region. **Material and Methods**: Our study analyzed the new cases of type 1 diabetes in children during January 2018 to April 2024. Using clinical and laboratory findings, patients data were obtained, such as: sensorium state, BMI, plasma glucose, HbA1c, arterial Ph, serum bicarbonate, urine ketones, vitamin D, ATPO, anti-transglutaminase immunoglobulin A and SARS COV2 IgG. **Results**: During this work we studied 84 patients with type 1 diabetes, that were diagnosed in the Children’s Hospital from Galati, starting from the beginning of the 2018 year, most of them during 2023 and half of the numbers from last year were registered already since the beginning of this year. Globally 54.76% were girls, and 42.19% had the age of 5-10 years old. Comparing the average annual incidence on national level, estimated of 10/100000 people, for pediatric cases in Galati Region, starting from 2020, almost double the incidence were seen, with and exception for the 2021 year. The hospitalization rate for type I diabetes also plummeted in 2020 but there seems to be a decrease in 2023 comparing to the beginning of the pandemics. Most severe ketoacidosis and low BMI of these patients were seen during pandemics with a slight decrease in numbers for last year. Also, most of the cases with decreased vitamin D levels, increase ATPO, increased anti transglutaminase IgA and anti SARS COV2 IgG were seen during the pandemic years. **Conclusions**: Highlighting this study we have seen a slight predominance of girls with type 1 diabetes. Most patients had severe onset in the beginning of the pandemics with an increase in other autoimmune manifestations. The SARS COV2 infection may reveal more cases with pediatric type 1 diabetes in the future as we are currently experiencing compared to the pre-pandemic years.

Keywords: type 1 diabetes, Covid pandemic, autoimmunity.

OP.9.26 Do I suffer from a psychosomatic disorder?

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Abstract

Introduction: The present work presents the end results of the research thesis within the in-depth doctoral studies in the medical field. After studying the incidence of psychosomatic disorders on a group of 196,709 patients, a scoring instrument was developed aiming to be a helpful tool in the diagnosis of psychosomatic disorders. **Material and Methods**: 196,709 patients were enrolled in the longitudinal study and 767 patients in transversal research. The data were analyzed in the SPSS statistics software in order to establish the impact of psychosomatic disorders on the estimated duration of hospitalization and on the frequency of hospitalization. **Results**: From the analysis it appears that psychosomatic disorders become psychosomatic pathologies, if a timely psychological or pharmaceutical intervention is not performed. Thus, I consider it would be appropriate to introduce a helpful tool in the diagnosis of this type of disorders, to adapt the therapeutic attitude from the very first starting point - the dialogue with the patient, the detailed anamnesis. **Conclusions**: The analysis of the data obtained in the prior 5 years confirms the research hypotheses, even if the initially underdiagnosed psychosomatic disorders can generate a research error - average representative sample (approximately 13%) from the cohort of 196,709 patients.

Keywords: psychosomatic disorders, anamnesis, diagnosis, estimated duration of hospitalization, frequency of hospitalization

OP.9.27 The use of hematogenous marrow concentrate in the treatment of aseptic necrosis of the femoral head associated with Covid-19 infection

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Abstract:

Introduction: The infection with Covid-19 and the treatment administrated to reduce or remove its effects have generated a series of associated conditions, some of which are generated by the infection itself, such as pulmonary embolism, deep vein thrombosis, myocardial infarction, myalgia, dyspnea, depression, anxiety, others attributed to drugs used in treatment regimens, such as orthopedic conditions. Among these, one of the most frequently reported conditions is aseptic necrosis of the femoral head, mainly attributed to corticosteroid treatment. The treatment of these associated conditions represented a challenge, which generated medical debates and the approach of new therapeutic attitudes. **Material and Methods:** We present to you the case of a 40-year-old patient, infected with Covid-19 in 2020, infection remitted under specific treatment that included corticosteroids and who later developed aseptic necrosis of the femoral head, bilateral, stage III - Ficat and Arlet classification. The patient a was treated between March and June 2022 in Monza Hospital by the femoral head drilling method with a 6.5 mm drill, with the addition of aspirated hematogenous marrow collected from the iliac crest and centrifuged for 15 min at 3500 revolutions/minute, the patient subsequently avoiding support on the operated limb for 1.5 months and 1.5 months after the surgery for the second hip, a session of 15 sessions of hyperbaric therapy began. The surgeries took place at a distance of 3 months from each other, with the recovery period for the previously treated limb. **Results:** 15 months after the start of the treatment, the patient is cured at the level of the coxo-femoral joint of the right lower limb and stationary in the left one, the patient continuing the hyperbaric therapy as well as an intense physical therapy program for total recovery. The patient will repeat the magnetic resonance of the pelvis to follow the evolution of the aseptic necrosis of the left femoral head. **Conclusions:** Aseptic necrosis of the femoral head is one of the most frequent complications of corticosteroid treatment in Covid-19 infection. The use of hematogenous marrow concentrate improves the results obtained, stimulating osteosynthesis, reducing the post-operative recovery period and increasing the effectiveness of surgical treatment. The use of hematogenous marrow concentrate significantly improves the results obtained by the classical methods of simple drilling, with or without bone addition.

Keywords: aseptic necrosis, bone drilling, marrow adition, Covid-19.

OP.9.28 The hidden face of the COVID-19 pandemic – post-COVID sequelae and autoimmune diseases in children

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Abstract

Introduction*:* More than 4 years after the official declaration of the COVID-19 pandemic, the medical world still seems to be grappling with the problem triggered by the action of SARS-CoV-2 and its long-term immune system complications. Some cases of autoimmune diseases triggered post COVID-19 have been reported. Some of the first evidence that SARS-CoV-2 infection leads to dysregulated immune system responses came from paediatric patients who developed a Multisystem Inflammatory Syndrome about four weeks after COVID-19. **Materials and methods:** Based on data presented in the literature, a review of autoimmune diseases triggered post COVID in the pediatric population, we present the case a patient who developed an autoimmune disease (SLE) at about two and a half months after an asymtomatic COVID-19. **Discussions and results:** Variability in clinical manifestations of SLE, such as rash, described in about 65% of pacients, leukopenia, fatigability (80%) or headache (55-90%) in the COVID-19 context, make it difficult to diagnose the condition in its early stages duet o similarities with other conditions. The slow evolution, the paraclinical changes in dynamics, which revealed severe anaemia, inflammatory syndrome, liver damage, the difficulty in early diagnosis and implicitly late application of effective therapeutic management led to exacerbation of the general condition and the appearance of renal complications. **Conclusions:** The difficulty in diagnosing SLE, requires further studies to assess the role of COVID-19 as a trigger of autoimmune diseases in children, as well as the coexistence of SARS-CoV-2 with other possible triggers of SLE and the impact on the development of juvenile systemic lupus erythematosus.
Keywords: autoimmune diseases, SARS-CoV-2, COVID-19, pediatric patients, SLE

OP.9.29 The prevalence of injuries in amateur athletes practicing group sports

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The presenting author: Gurău Tudor Vladimir

Abstract

Sport, as a social activity, is an important factor in improving numerous benefits to individuals and also public health. Amateur athletes frequently practice group sports like: football, baseball, handball, for fun, meeting with friends on weekends or after work. Injuries may occur as an unwanted side effect during these sports activities, and this reduces the benefits and the interest in participating in future physical activity.This review aims to provide a comprehensive analysis of injury types and their prevalence in team sports. To achieve this, an extensive search was carried out in the specialized literature and electronic databases. Group sports show a higher frequency of injuries, especially injuries to the skeleton and muscles, such as: contusions, sprains, fractures, muscle contractions and concussions, the most affected areas would be: the lower and upper limbs, the head and the neck. The risk factors that contribute to the occurrence of these injuries are: sex, age, training, equipment, changes in the rules and the playing field. Knowing the types and prevalence of injuries in group sports is important for establishing strategies to prevent these injuries: a better education of the athlete, the use of appropriate training techniques, the use of equipment suitable for the sport practiced, changes in the rules and the provision of medical specialized assistance.

Keywords: amateur athlete, injuries, group sport.

OP.9.30 Toxicities and response to treatment with checkpoint inhibitors in non-small cell lung cancer

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Abstract

Introduction: The incidence of bronchopulmonary cancer has increased significantly in recent decades, especially in economically developed countries, today being the leading cause of death in men and the 3rd leading cause of death in women. Checkpoint inhibitor therapy is a form of cancer immunotherapy. The therapy targets immune checkpoints, key regulators of the immune system, which when stimulated, can decrease the immune response. Currently approved checkpoint inhibitors target are CTLA4, PD-1, PD-L1 molecules. It appears that cancer-mediated regulation of PD-L1 on the cell surface can inhibit T cells that would otherwise attack the tumor. Checkpoint inhibitors that bind to either PD-1 or PD-L1 block the interaction and allow T cells to attack the tumor. **Material and method**: This Doctoral Thesis aims to follow up patients under treatment with checkpoint inhibitors between January 2019 and December 2025. The present study represents partial results in the period 01.01.2019 – 31.12.2020 of the patients from the Oncology department of the "St. Ap. Andrei", Galati with the diagnosis of non-small cell bronchopulmonary neoplasm, who underwent treatment with checkpoint inhibitors associated with radiotherapy/chemotherapy, the type of checkpoint inhibitors used, the duration of the treatment and its complications. **Result**: Impaired performance status, presence of comorbidities and multiple metastatic sites represented unfavorable prognostic factors. Patients with cardiovascular comorbidities showed a favorable response to immunotherapy. **Conclusions**: Association between immunotherapy and chemotherapy ± radiation therapy resulted in increased survival. The treatment was generally well tolerated by the patients. The presence of complications did not lead to the interruption of immunotherapy requiring only interdisciplinary consultations and specific treatment.

Keywords: checkpoint inhibitors, non-small cell lung cancer, toxicity.

PP.9.31 Primary hyperhidrosis in children

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Abstract

Introduction: Primary hyperhidrosis (PH) is a relatively common chronic disorder, characterized by significant and uncontrollable sweating. The predominant areas of occurrence are: hands, feet, head, armpits and affects both men and women equally, with a false impression of increased prevalence in women. **Material and method:** This is a retrospective study conducted in Department of Neuropsychomotor Rehabilitation of the hospital between January 2014 and December 2023. The primary objective for this study was to determinate the incidence of cases with the above diagnosis, the gender of the patients and the environment of origin. **Results:** We found 111 patients who correspond to the inclusion and exclusion criteria, of whom 67 (60.36%) were girls and 44 (39.64%) were boys. The mean age of the group is 10.59±2.87, ranging from 6 to 17. The average number of diagnosed patients per year was 6.7 girls and 4.4 boys, values comparable to those in the specialized literature, this disease being more frequent among the female population compared to the male population. Among the 111 patients diagnosed with hyperhidrosis, 89 (80.18%) were from the urban environment and 22 (19.82%) from the rural environment, and the average number of patients diagnosed per year was 8.90 from urban and 2.2 from the rural area.

Keywords: hyperhidrosis, sweat, children.

PP.9.32 Predictive factors of right ventricular pacing-induced cardiomyopathy

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Abstract

Introduction: Right ventricular (RV) pacing is the main treatment modality for patients with advanced atrioventricular (AV) block. However chronic RV pacing can cause cardiac systolic dysfunction and heart failure (HF) due to electric and mechanical dyssynchrony by triggering the right ventricle to contract before the left ventricle (LV) (interventricular dyssynchrony) and the septum to contract before the lateral walls (intraventricular dyssynchrony). Incidence of pacing-induced cardiomyopathy is estimated to occur in 5-20% of patients using right ventricular pacing for more than two years. **Material and Methods**: In this review, we discuss studies that have described the predictive factors and have shown deleterious effects of chronic RV pacing on systolic cardiac function causing PICM. **Results**: These studies found that men are more likely to experience PICM than women. History of heart diseases such as myocardial infarction, atrial fibrillation, and pre-existing systolic dysfunction, left bundle branch block at baseline ECG, lower baseline LV ejection fraction, wider paced QRS duration, and higher burden of right ventricular pacing were predictors of PICM. The retrospective study shows patient with baseline LVEF under 55% before pacing, wider paced QRS duration (>160msec), and pacing burden more than 33% has a higher risk for developing PICM. **Conclusions**: The presence of ≥2 factors increased the odds of PICM, twelve-fold. A narrower paced QRS, the only modifiable risk factor may help mitigate development of PICM.

Keywords: right ventricular pacing, cardiac systolic dysfunction

PP.9.33 Imaging findings in cognitive impairment in patients with multiple sclerosis

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Abstract

Introduction: This paper aims to highlight the effects of cognitive impairment in multiple sclerosis outcomes.

Material and Methods: The data was collected from recent literature, including patients with MRI investigations.

Results: The latest research evidenced that patients had poorer quality of life due to cognitive impairment, rather than physical disability. MRI parameters are useful in evaluating the disease's morbidity, clinical disability and cognitive impairment. Cognitive dysfunction and increased risk of decline were correlated with hippocampi and gray matter nuclei volume, while thalamus volume was associated with information processing speed, attention and verbal memory. Lesion load and location may be an independent predictor of cognitive decline.

Conclusions: This study enhances the importance of MRI investigations in the assessment of patients with multiple sclerosis and the associated risk of cognitive decline.

Keywords: cognition, MRI, multiple sclerosis, volumetry.

SECTION 10
ADVANCED RESEARCH IN PHARMACEUTICAL SCIENCES

OP. 10.1 The pharmacotherapeutic capacity of *Ficus carica* in the context of diabetes

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Abstract

In the context of diabetes, *Ficus carica* has been the subject of increased research interest, due to its biologically active compounds, such as phenols (chlorogenic acid and flavonoids), which have shown the ability to reduce blood glucose levels and improve insulin sensitivity, antioxidants (vitamin C and E), which can help reduce oxidative stress associated with diabetes and protect cells from damage, fiber, which can slow the absorption of glucose from food and help maintain blood sugar levels, other phytochemicals (terpenoids and alkaloids), which have been studied for their potential effects on glucose metabolism and other physiological processes involved in diabetes. Experimental studies, both *in vivo* and *in vitro*, investigated the mechanisms of action of *Ficus carica*, highlighting its ability to regulate glucose metabolism, as well as its potential to alleviate diabetes complications, including diabetic nephropathy and other tissue disorders. In addition, reference was made to the prospects of using innovative pharmaceutical forms, such as polymers with *Ficus carica* extracts, in the treatment of chronic wounds associated with diabetes, thus providing a comprehensive approach to therapeutic possibilities. This review analyzes recent research findings and identifies future directions for the development and therapeutic application of *Ficus carica* in diabetes management.

Keywords: *Ficus carica*, diabetes, mechanisms of action, alternative therapy, diabetic wounds, polymers.

OP. 10.2 Preliminary research of new molecular hybrids with azole nucleus with potential antimicrobial action

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Abstract

Over time, pathogens have demonstrated resistance to actual antimicrobial therapies due to their rapid doubling times and high mutation rates. The development of innovative antimicrobial agents is necessary, as some current treatments are no longer effective due to resistance development, various side effects, and high toxicity. Hybridization represents a promising strategy to develop novel drugs, and hybridization of the azole with other pharmacophores has the potential to increase the activity and overcome the drug resistance. Azoles are highly privileged moieties for the discovery of novel drugs; they can act as linkers to tether different pharmacophores and also serve as pharmacophores themselves. The objective of this research is to chemically and pharmacologically develop new molecular hybrids with antimicrobial action, incorporating the azole core into their structure. Therefore, the study includes two main directions: the synthesis of the azole nucleus and its coupling with different functional groups, and the chemical modeling of known pharmaceutical substances such as ketoconazole or fluconazole, aimed at increasing their biological activity and reducing toxicity. In conclusion, the synthetic strategies employed in this work have the potential to prepare a large number of compounds for further refinement of structures, ultimately yielding molecules suitable for development as antimicrobial drugs.

Keywords: azoles, antimicrobial, antifungal, hybrid compounds.

OP. 10.3 The pharmaco-therapeutic capacity of *Geranium oil* and possible optimization of transdermal systems in oral pathology

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Abstract

The paper is a review of *Geranium oil*. It originated in South Africa, with over 300 species; the family it belongs to is *Geraniaceae*. The review focuses on *Pelargonium Roseum* and *Pelargonium Graveolens* species obtained by steam distillation from *Pelargonium graveolens* plants. *Geranium oil* is known for its therapeutic properties. Following gas chromatographic examination, it was found to have increased concentrations of citronellol, with major importance, and the presence in smaller quantities of limonene α-pymene, and ß-pimen. Thanks to these compounds, this oil has been studied with special care. Current pharmacological and medical studies have shown that geranium oil can have broad-spectrum actions in the field of prevention, dermatology and oral pathologies holding the following pharmacological actions: antibacterial, antiviral, antifungal, anti-inflammatory, antioxidant, odorizing, antidepressant, hypnotic, calming, antitumor. These characteristics recommend this type of oil as a promising candidate for application in oral pathology, where bacterial infections and inflammations are common. Encapsulating *Geranium oil* in nanocapsules can amplify these effects by facilitating the controlled and targeted release of active compounds directly to the pathological site into the oral cavity. In conclusion, *Geranium oil*, due to scientifically proven pharmacological actions, has shown that it can be successfully used both preventively and curatively in dermatology and oral pathologies. Recently, nanotechnology has provided innovative solutions for local administration of therapeutic agents, improving the safety and efficacy profile of treatments. Nanocapsulating *Geranium oil* could reduce side effects and increase the bioavailability of its compounds in oral tissues. By protecting active ingredients from degradation of the oral environment and promoting sustained release, these nanosystems can effectively combat oral pathogens and modulate the local inflammatory response.

Keywords: *Geranium oil*, gas chromatography, nanotechnology, oral pathology

OP. 10.4 Modern techniques for extracting quercetin from various plant sources

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Abstract

Quercetin is a bioactive compound, a flavonoid, commonly found in various vegetables, fruits, and seeds that has been extensively studied for its antioxidant, antimicrobial, antiproliferative, anti-inflammatory, and antidiabetic effects. To determine the therapeutic properties of quercetin, it is crucial to use the most efficient extraction method, with a highly sensitive detection rate. This review provides valuable information on the most efficient and sensitive methods for separating and purifying quercetin from various plants. The study summarizes different novel extraction techniques, including pressurized hot water extraction (PHWE), ultrasound assisted extraction (UAE), microwave assisted extraction (MAE), supercritical fluid extraction (SFE), subcritical water extraction (SWE), enzyme assisted extraction (EAE) and other traditional methods such as maceration extraction (ME), Soxhlet extraction (SE), conventional extraction (CSE) and serial maceration extraction (SME), to extract this valuable flavonoid. The study also includes other novel methods of extraction using molecularly imprinted technology for selectivity and resistance to complex matrix interference, and ionic liquid-based digestion extraction, aiming for an economic and environmentally friendly method. Furthermore, this paper provides also the mechanism, concept, and factors affecting the extraction with a focus on the efficacity and sensitivity of the methods for separating and purifying quercetin from plants.

Keywords: quercetin, extraction, phenolic and flavonoid content, novel techniques.

OP. 10.5 Obtaining new hippuric acid derivatives with potential antitumor activity

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Abstract

Introduction. Cancer is a disease with increasing prevalence at the population level, being considered a public health problem, one of the main causes of death worldwide. From the point of view of treatment, the most difficult thing is to eliminate the cancerous cells without damaging the surrounding non-cancerous cells in any way, an aspect frequently encountered in the case of chemotherapy and radiotherapy. Thus, the development of new compounds with potential antitumor action and minimal side effects is imperative.
Materials and methods. New micromolecular derivatives of hippuric acid have been synthesized, starting from the reaction between glycine and p-nitrobenzoyl chloride to obtain nitrohippuric acid. This was subsequently subjected to the reduction reaction with ferrous sulfate in the presence of ammonia. The compound thus obtained, aminohippuric acid, was reacted with ammonium thiocyanate in search of thio-ureido-benzamidacetic acid. Thio-ureido-benzamidacetic acid was subsequently reacted with bromo-pyridine acetate to obtain pyridine-thiazole-N-phenyl-oxazole-methyl benzamide, with antitumor potential. At the same time, starting from hippuric acid and benzonitrile derivatives, compounds with potential antitumor action were synthesized. For the compounds thus obtained, the characterization from a physico-chemical point of view (molecular formula, relative mass, appearance, solubility, melting point) and structural confirmation by IR spectroscopy was carried out. The compounds were also analyzed from the point of view of antioxidant actions, preliminary effect in the antitumor action, by the ammonium heptamolybdate method, as well as with ferric chloride.
Results. The obtained results confirmed both the structure of the compounds obtained, through changes in the physico-chemical parameters in the sense indicated by the specialized literature, as well as by highlighting the characteristic bands both for the aromatic nucleus and for the specific functional groups produced by the reaction
Conclusions. The development and research of new micro and macro molecular compounds of hippuric acid is in a continuous expansion, so that the physico-chemical characterization and spectral evaluation of the new compounds obtained are an important perspective field in antineoplastic medical research**.**

Keywords: anti-cancer derivatives, synthesis compound, hippuric acid derivatives

OP. 10.6 Grape pomace, a source of polyphenols in the management of inflammation and oxidative stress

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Abstract

Polyphenols extracted from grape pomace (GP) represent an important source of active substances that can be addressed in the management of inflammation and oxidative stress. This work represents a review of research from recent years, which highlights the biological activity of grape pomace, published in specialized journals, following research both *in vitro* and *in vivo. In vitro* studies highlight the antioxidant effects by decreasing the level of reactive oxygen species (ROS), thiobarbituric acid and malondialdehyde and increasing glutathione, also the anti-inflammatory actions of GP polyphenols are demonstrated by inhibiting the inflammatory pathways of nuclear factor *kappa* B and prostaglandin E2 and decreasing interleukin-8 (IL-8). *In vivo* research confirms the anti-inflammatory action by inhibiting IL-1 α, IL-1 β, IL-6, TNF α (tumor necrosis factor) and the release of C-reactive protein (CRP) as well as the antioxidant action by increasing the level of catalase, glutathione peroxidase and superoxide dismutase. Grape pomace can modulate the endogenous pathway responsible for reducing chronic inflammation and oxidative stress. The present paper analyzes the beneficial effects for the human body in oxidative stress and inflammation, suggesting that it could become an adjunctive treatment in an attempt to reduce the side effects of classical anti-inflammatory drugs, such as anti-inflammatory drugs. The inclusion of polyphenols from grape pomace in pharmaceutical forms can be an alternative in the management of oxidative stress and inflammation versus anti-inflammatory drugs.

Keywords: grape pomace, polyphenols, anti-inflammatory, antioxidant

OP. 10.7 Obtaining, characterization and structural confirmation of new biguanide derivatives with potential antidiabetic action

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Abstract

Indroduction. In the case of type 2 diabetes mellitus, a complex chronic metabolic disorder characterized by hyperglycemia, the first-line oral treatment is represented by metformin, a biguanide structure with proven anti-hyperglycemic properties, alongside thiazolidinediones, sulfonylureas, alpha-glucosidase inhibitors, DPP-4 inhibitors and meglitinides. The objective of this research was to obtain new biguanide derivatives with improved antidiabetic activity, starting from cyanoguanidine, which was subjected to condensation reaction with various aliphatic amines: dimethylamine, ethylamine, and phenylethylamine, in an alcoholic medium.

Materials and methods: Cyanoguanidine was dissolved in n-butanol, followed by addition of the corresponding amine in a 1:1 molar ratio and the reaction mixture was refluxed for 16-24 hours. At the end of the reflux time, the reaction mixture was concentrated using a rotary evaporator. The obtained precipitates were purified by crystallization in organic solvents and dried at room temperature and in an oven.

Results: The obtained powders were evaluated for their physicochemical properties, including appearance, chemical formula, relative mass, melting point, solubility and reaction yield. The syntheses were successful, with yields ranging from 42-76%. The obtained biguanide compounds were characterized by HPLC chromatography, and regarding structural confirmation, analysis of IR spectra identified absorption bands characteristic of all functional groups, confirming that the condensation reactions occurred.

Conclusions: This study resulted in a series of compounds that open new promising research directions in the treatment of diabetes mellitus.

Keywords: diabetes mellitus, biguanides, cyanoguanidine, aliphatic amines, organic solvents**.**

OP. 10.8 Cobra venom - current status and perspectives in therapeutic use

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Abstract

The paper is a review about snake venom, especially cobra venom and its health benefits. The curative capacity of venom has been known since antiquity, the snake becoming a symbol of medicine and pharmacy. Along with the progress of modern biotechnology, the use of snake venom components as a source of potential therapeutic values has attracted the attention of the pharmaceutical industry. We analyzed the current progress in studying the benefits of cobra venom regarding the pharmacological effects and the mechanisms of action following its administration, as well as the new approaches regarding delivery and transport systems that involve nanoparticle loading as a delivery vehicle. In the last decades, only a small part of the components of snake venom have been identified, characterized and approved in the production of pharmaceutical products, many other components being involved in preclinical or clinical studies for therapeutic applications. The anticancer activities of cobra venom represent one of its most attractive therapeutic characteristics and have been actively researched and reviewed in recent years, and as a scientific novelty would be the discovery of activity for the prevention and treatment of COVID-19. Nanoparticles have proven to be effective for various bioactive compounds including cobra venom which could thus be safely transported, its stability, bioavailability would be improved and a targeted delivery would take place. Cobra venom, through its studied components, especially cobrotoxin and the encouraging results obtained, demonstrates that it could open new perspectives for the field of pharmaceutical product development and research for new treatments, but additional studies and a close collaboration between researchers and clinicians for evaluating the safety and efficacy of administration in humans.

Keywords: snake venom, cobra venom, cobrotoxin, nanoparticle

OP. 10.9 PDRN on ADORA2A in Retinal Diseases

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Abstract

Polydeoxyribonucleotide (PDRN) has emerged as a promising therapeutic candidate for the treatment of various medical conditions, owing to its regenerative properties and pharmacological actions, including the activation of A2A adenosine receptors (ADORA2A). In the realm of ophthalmology, retinal diseases constitute a significant cause of visual impairment and blindness, with ADORA2A playing a crucial role in their pathophysiology through the modulation of inflammation, neovascularization, and neurotransmitter release. This review aims to elucidate the potential therapeutic benefits of PDRN in retinal diseases by focusing on its interaction with ADORA2A receptors. We conducted a comprehensive analysis of the existing literature, encompassing preclinical studies, clinical trials, and pharmacological research, to explore the role of ADORA2A in retinal physiology and pathology, the pharmacokinetic and pharmacodynamic properties of PDRN, and the therapeutic implications of targeting ADORA2A with PDRN in retinal diseases. Our review reveals that PDRN's engagement with ADORA2A receptors in the retina offers a novel pathway for addressing the complex mechanisms underlying retinal diseases, potentially leading to innovative treatment strategies that could augment current therapies. Moreover, we discuss the challenges and future perspectives in the development of PDRN-based treatments, emphasizing the need for further research to fully understand the mechanisms of action, optimize dosing regimens, and evaluate long-term outcomes in patients with retinal diseases. This review highlights the promising intersection between PDRN therapy and ADORA2A modulation, suggesting a new horizon in the management of retinal diseases that could significantly impact clinical practice and improve patient outcomes.

Keywords: Polydeoxyribonucleotide (PDRN), Retinal diseases, Anti-inflammatory therapies, Pharmacological targeting, Ocular pharmacotherapy, ADORA2A modulation

OP. 10.10 Research on controlled drug release systems applied to the preparation of rectal pharmaceutical forms

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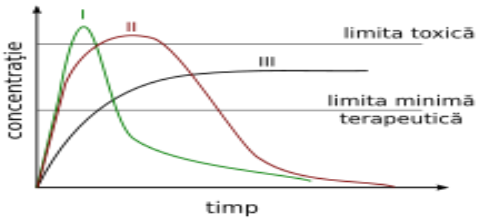
Abstract

Introduction. The complexity of human biological systems requires the development of controlled drug release systems, suitable for personalized treatment, but also targeted to each area of the body. We believe that through an interdisciplinary approach to this field of monitored release systems, safer and more effective therapies will be developed. At the same time, the problem of managing side effects will be improved. Therefore, knowing the advantages of administering a medicine rectally, but also the benefits brought by controlled release systems, we consider it opportune to jointly study them, but also to put into practice some solutions for the development of appropriate pharmaceutical forms. Rectal administration of drugs to treat local or systemic conditions is a long-used medical practice. Considered an optimal alternative to other routes of administration, the colorectal mucosa ensures an improved systemic bioavailability. The physico-chemical and enzymatic environment of the mucosa, but also the fact that the effect of the first hepatic and intestinal passage is avoided - are just some of the advantages of rectal administration. However, problems related to the patient's level of acceptability, but also the weak and irregular absorption of the active substance can affect the efficiency of this route of administration. The development of controlled drug release systems is ongoing and may solve some of the problems associated with standard approaches.
Materials and methods. We will carry out in vitro studies necessary to compare the effectiveness and safety of treatment with rectal pharmaceutical forms made with controlled drug release systems with standard, classic pharmaceutical forms. We set out to evaluate a combination of active drugs inserted in specific vectors (microcapsules, nanocapsules, liposomes) which we will later analyze from multiple perspectives and dimensions. Analyzes will be carried out from the point of view of rheology, stability, homogeneity, solubility, pH, acidity indices, saponification, etc. We will use EXCEL to complete the data obtained on the sheets corresponding to each analysis. Then, the data will be processed and compared using SPSS 16 or EPIINFO7 software.
Outcomes. Considered an optimal alternative to other routes of administration, the colorectal mucosa ensures an improved systemic bioavailability. The physico-chemical and enzymatic environment of the mucosa, but also the fact that the effect of the first hepatic and intestinal passage is avoided - are just some of the advantages of rectal administration. And we hope that the results will be in favor of using systems with controlled drug release in the manufacture of rectal pharmaceutical forms.
Conclusions. Although the designing of such pharmaceutical forms based on systems with controlled drug release is not as simple and easy as the manufacture of classic pharmaceutical forms for the rectal route, under the guidance of the coordinating professor, in well-equipped laboratories, we hope to create

innovative pharmaceutical forms whose characteristics will be a starting point for a new and future trend.
Keywords: controlled drug release systems, rectal, pharmaceutical forms

Drug delivery systems



I. Instant release
II. Extended release
III. Controlled release

OP. 10.11 New sulfonamide derivatives: synthesis, characterization, *in Vitro* evaluation of antihyperglicemic and antimicrobial activities

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Abstract

Introduction. Despite a large number of commercially available drugs, the search for new pharmaceutical compounds that improve the chances of healing and recovery of patients suffering from difficult-to-manage diseases, such as mellitus diabetes, represents one of the great challenges of modern medicine. Used for a long time and addressed in various researches, sulfonamides represent a class of therapeutic candidates used for various anti-inflammatory, antibacterial, antidiabetic, analgesic, antitumor, antiviral, and antifungal actions.

Materials and methods. This paper presents a inexpensive, efficient, and simple protocol for the synthesis of new sulfonamide derivatives by condensation reactions of p-toluene sulfonamide (p-TSA) with two different isocyanates and urea, using Na2CO3 as a catalyst and acetone as a reaction medium. The physico-chemical properties of the new compounds were characterized by evaluating their color, smell, melting point, solubility in different solvents, and yield. Scanning Electron Microscopy (SEM) was used to obtain topographical information about particle size and shape. The structure of the derivatives was confirmed by spectral methods, respectively Fourier Transform Infrared Spectroscopy (FTIR) and Proton Nuclear Magnetic Resonance (1H-NMR). On the hand in Vitro inhibition methods of α-amylase and α-glucosidase enzymes were used to evaluate the antidiabetic activity, on the other hand the disk diffusion test and binary dilution method were used to evaluate the antimicrobial activity.

Results. As a result of these analyses, 5 synthetic compounds were obtained, with high degrees of purity and satisfactory yields, between 66.73% and 89.62%. FTIR and 1H-NMR led to the easy observation of the azomethine groups, amide, the benzene ring, and the aromatic halogenated compounds. In the in Vitro evaluation of the antidiabetic activity, the inhibition potential of the α-amylase and the α-glucosidase enzyme was between 0.5%-52%, respectively 0-95.56%. When evaluating the antimicrobial potential, the zone of inhibition was measured and the minimum inhibitory concentration was calculated for each compound obtained, using sulfathiazole as the reference antibacterial agent.

Conclusions. These satisfactory preliminary results support the antidiabetic potential of all the synthesized compounds, as well as the antimicrobial potential of only some of them, thus demonstrating the possibility of their applicability in several conditions: diabetes, urinary tract infections, vaginal infections, skin infections, inflammatory bowel disease.

Keywords: antihyperglicemiant, antimicrobial, synthesis compounds, p-toluenesulfonamide**.**

OP. 10.12 Antimicrobial activity of plant extracts on the development of microbial biofilms on inert substrate – review

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Abstract

A study of specialized literature from various databases was carried out Web of Science, PubMed, Data Base, Google Scholar, Cochraine Library, and Embase, between 2020 and 2023. The oral microbiome includes approximately 700 phylotypes, of which more than a half may be present at any time in the oral cavity of a healthy individual. Implant-supported prosthetic restorations are a widely used treatment in dental practice. Numerous studies published in the literature report high success rates over time, but late clinical complications have also been reported. It is mainly due to peri-implant infections (peri-implantitis), as a result of an inflammatory process caused by microbial penetration through the implant-abutment interface and colonization of the implant surfaces/component parts. The adhesion capacity of the microbial strains to the investigated surfaces is determined by determining the number of colony forming units/ml (CFU/ml). The testing and quantitative determination of the antimicrobial activity of an extract is carried out by the method of serial microdilutions in a liquid medium, in order to determine the minimum inhibitory concentration (MIC).

Keywords: antimicrobian, extract vegetal, biofil

OP. 10.13 *Paeonia tenuifolia, Paeonia peregrina* and *Cotinus coggygria* in the spontaneous flora of Dobrogea. Actions and benefits

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Abstract

Motivation: Two species of plants from the genus *Paeonia* were discovered on the surface of Dobrogea: *Paeonia tenuifolia* and *Paeonia peregrina*. These have become very popular for their medicinal and edible properties. *Cotinus coggygria* can represent an important source of active substances that can be approached in the treatment of skin and mucous membrane injuries.
Materials and methods: This study represents an overall research of the medical benefits of these plants present in the area of Dobrogea. Also, a parallel is sought between the two plants of the same genus, being a species with multiple health benefits. In the last decades, studies were carried out, later published in specialized journals. The extensive phytochemical studies and pharmacological activity analyzes focused primarily on the roots of the plants, confirming antioxidant, anti-inflammatory, antitumor, hepatoprotective, cardioprotective and immunomodulators. Regarding *Cotinus coggygria*, studies were carried out in Dobrogea confirming the usefulness of the plant as a healing agent in open wounds, but also in gynecological disorders.
Results and discussions: The Dobrogea area is a special area in terms of the spread of medicinal plants and therefore in this paper we will highlight the physicochemical, pharmacological, microbiological properties of the active principles, their health benefits. We will follow these plant species closely and try to extract the active principles, incorporating them into convenient pharmaceutical forms. From the point of view of the extraction medium used, because most of the biologically active compounds in the petals of *P. peregrina* and *tenuifolia* are polar molecules (flavonoid glycosides, anthocyanins, terpenes, phenolic acids, etc.), methanol and water are considered suitable extraction media. In Serbia, there was a study on the two plants, and as a result, major differences were found in their chemical composition, therefore it is a topic of interest that we will address in the Dobrogea region as well.

Keywords: anti-inflamatory, hepatoprotective, *Paeonia*, Dobrogea