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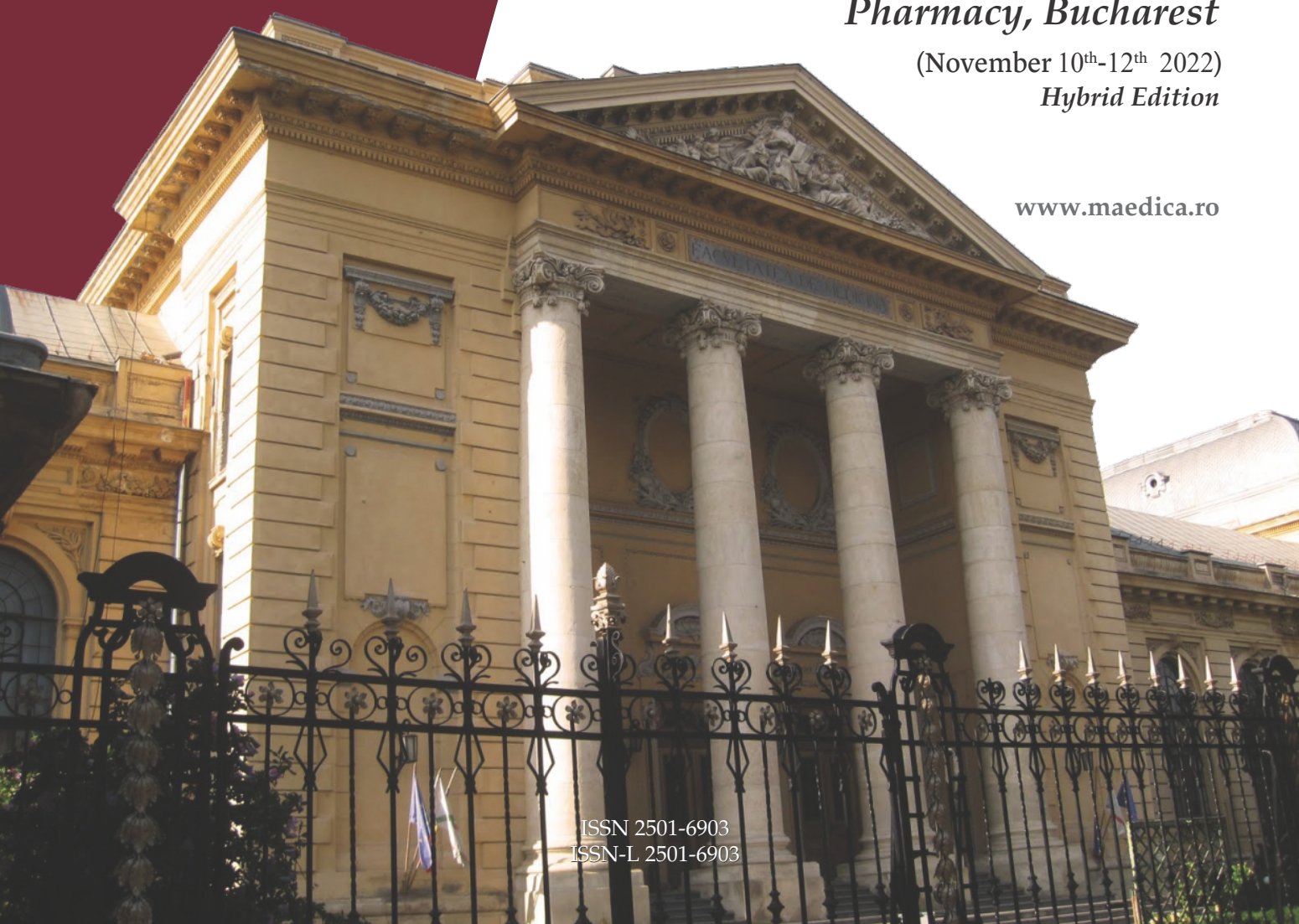

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PALATUL PARLAMENTULUI
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ID403 Mechanical Behaviour of Interim Prosthetic Materials Produced by Additive Manufacturing

Mihaela Pantea[1], Robert-Catalin Ciocoiu[2], Marina Imre[1], Ana Maria Cristina Tancu[1], Alexandru Eugen Petre[1]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*University Politehnica of Bucharest, Romania*

Objectives: The purpose of this in vitro study was to investigate the mechanical behavior (compressive and flexural strength) of certain additive manufactured interim prosthetic resins in comparison to the ones obtained via conventional methods.

Materials and Methods: Four resin materials used to obtain interim fixed dental prostheses were investigated: two 3D-printed resins, and two conventional acrylic resins (an auto-polymerized resin, and a pressure/heat-cured acrylic resin). Cylinder-shaped samples (25 x 25mm/diameter x height) for the compression tests and bar-shaped samples (80 x 20 x 5mm/length x width x thickness) for the flexural tests were obtained in accordance with the producers' recommendations. The resulting resin samples were subjected to mechanical tests using a universal testing machine (Walter+Bai LFV 300, Walter+Bai AG, Löhningen, Switzerland). A fractographic analysis of samples failed in bending was additionally performed.

Results: The additive manufactured samples exhibited higher elastic moduli (2.4±0.02GPa and 2.6±0.18GPa) than the conventional samples (1.3±0.19GPa and 1.3±0.38GPa), as well as higher average bending strength (141±17MPa and 143±15MPa) when compared to conventional samples (88±10MPa and 76±7MPa). The results also suggested that the materials are more homogenous when produced via additive manufacturing.

Conclusions: The tested 3D-printed interim resins obtain better results than the conventional ones, in both the compression and flexure tests; from a structural point of view, it was concluded that the tested 3D-printed materials presented a better homogeneity than the conventional ones.

ID507 Black-pigmented Prevotella Strains Isolated from the Oropharynx of Healthy Dental Students

Gabriela Bancescu[1], Vanda Madalina Nicolescu[1], Lidia Sfetcu[1]

[1] *"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Objective: The main purpose of the study was to determine the frequency of oropharyngeal colonization with black-pigmented Prevotella in a group of 33 students in the second year of study at the Faculty of Dentistry of "Carol Davila" University of Medicine and Pharmacy - Bucharest.

Methods: The sample of investigated students consisted of 6 male and 27 female students, aged 19 to 24, who denied the administration of antibiotics in the last 6 months before sampling. An oropharyngeal swab was collected from each student in January 2018. All samples were cultured anaerobically on Schaedler agar and Columbia blood agar (BioMeriéux, France). The black-pigmented anaerobic isolates were identified at the genus/species level by the MASTRING ID test (MAST Group Ltd., U.K.) and the Rapid ID 32 A system (BioMeriéux, France). In addition, the beta-lactamase production was investigated with nitrocefin sticks (Oxoid, U.K.).

Results: Thirty-five black-pigmented anaerobic strains were isolated: 5 strains of Gram-positive cocci and 30 strains of Gram-negative bacilli. The strains of black-pigmented anaerobic bacilli were isolated from 25 samples and belonged to the genus Prevotella. Twenty-three of these isolates were identified as Prevotella denticola and 7 isolates were identified as Prevotella melaninogenica. Pairs of P. melaninogenica - P. denticola strains were isolated from 5 oropharyngeal samples. The nitrocefin test showed positive results for 22 Prevotella isolates (6 P. melaninogenica strains and 16 P. denticola strains). In the case of the 5 pairs of Prevotella isolates, only the P. melaninogenica strain showed a positive reaction to the nitrocefin test.

Conclusion: Within this group of very young healthy adults, the frequency of the oropharyngeal colonization with black-pigmented Prevotella was about 76%. Of the black-pigmented Prevotella isolates, 73.33% were beta-lactamase producers. It is worth considering the high frequency of oral bacteria that produce beta-lactamases whenever antibiotic treatment of oral infections is needed.

ID544 The Loop of the Inferior Alveolar Nerve is a Rarely Occurring Morphology

Teodor-Casian Sicoe[1], Mugurel Constantin Rusu[1], Alexandra Diana Vrapciu[1], Dan-Răzvan Popa[1], Alexandru Nicolae Muresan[1,2], Catalina Bichir[1]

[1]Division of Anatomy, Faculty of Dental Medicine, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Research Department "Dr. Carol Davila" Central Military Emergency Hospital, Bucharest, Romania

Objectives: The mandibular canal and the inferior alveolar nerve (IAN), a branch of the mandibular nerve, form an intricate system that, in the proximity of the first mandibular premolar, optionally curves its course, thus describing an anatomical loop termed "the anterior mandibular loop" (AML). The AML is the most diverse neurovascular structure in the mandibular mental region. This study aimed to evaluate the AML anatomy and to compare the findings with the existing descriptions. The main objective of the study was to document the AML three-dimensional anatomic possibilities.

Methods: A retrospective study on 90 Cone Beam Computed Tomography (CBCT) files was conducted as to assess the prevalence and topography of the AML. The identification of this anatomical formation was achieved by using specific landmarks in all three anatomical planes.

Results: The AML has been classified anatomically into four types: Type A: complete AML (complete mesial extension to the mental foramen > 2 mm) (1.11%); Type B: partial AML (partial mesial extension to the mental foramen < 2 mm) (4.44%); Type C: partial AML (lack of extension of the IAN mesial to the mental foramen) (19.44)%; Type D: absent AML (75.01%).

Conclusions: Seemingly, the AML is rather absent. This decreases the textbook-defined risk of IAN damage when endosseous implants are inserted medially to the mental foramen.

ID594 Mandibular Foramen - Original Study and Critical Review of Literature

Andra Maria Zamfirescu[1], Mircea Ștefan Teiusianu[1], Mugurel Constantin Rusu[1]

[1]Department of Anatomy, Faculty of Dental Medicine, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objective: We sought to determine the correct anatomical location of the mandibular foramen (MF). This is an important landmark for successful inferior alveolar nerve block anesthesia and in preventing injuries to the mandibular vessels and nerve, during a variety of oral and maxillofacial surgical procedures. This study aimed to evaluate the usefulness of measurements as related to the MF, based on the scientific literature published in the last fifty years.

Methods: Cone-beam Computed Tomography (CBCT) was used to determine seven different measurements regarding the MF in 68 patients. Relevant articles that were published from 1977 to 2018 were documented . All relevant articles were appropriately reviewed.

Results: The ANOVA test has shown a statistically important difference in measurements between genders for the distance between MF and mandibular notch on the left side, as well as the distance between MF and lingula on the left side. Both parameters were significantly greater in males than in females.

Conclusion: Three-dimensional images of CBCT data are useful to determine the precise anatomical position of MF. When previous publications are documented care should be taken, as inaccurate or irrelevant data could result from inadequate methodologies of research.

ID400 A New Vegetal Hydrogel Useful for the Treatment of Bruises

Ligia Elena Duțu[1], Teodora Dalila Balaci[2], Maria Lidia Popescu[1], Elena Iuliana Ilie[1], Emanuela Alice Luta[1], Liliana Costea[1], Cerasela Elena Gird[1]

[1]Faculty of Pharmacy - Department of Pharmacognosy, Phytochemistry and Phytotherapy, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

[2]Faculty of Pharmacy - Department of Pharmaceutical Technology and Biopharmaceutics, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Introduction: Bruise (known in medical terms as ecchymosis) is a damage of blood vessels underneath the skin, that is usually caused by a blow, or an impact. Calendulae flos (Marigold), Arnicae flos (Arnica), Tammi rhizoma (Black-bryony) and Lavandulae flos (Lavender) are traditionally recommended for the treatment of bruises. The current paper presents the results conducted in order to develop a new topical hydrogel, which contains extracts corresponding to these four herbal raw materials.

Methods: In the first manufacturing stage, a hydroalcoholic dry extract was obtained, by macerate a mixture of marigold flowers, arnica flowers, black-bryony rhizome and lavender flowers (1:4:4:1, w/w/w/w) with ethanol 70%, v/v, followed by lyophylised. Further, this intermediate product was added in a gel base. Lavender essential oil was obtained by steam distillation from Lavender flowers, and finally was added to previous formulation. Vegetal raw materials and hydroalcoholic extract was phytochemically analyzed, using specific methods. Flavonoids (expressed as rutin equivalents) and phenolcarboxylic acids (expressed as caffeic acid equivalents) were determined by means of spectrophotometric methods. A volumetric compendial method was used to asses the essential oil in Lavender flowers, and a gravimetric method for mucilages, respectively. The finished product was characterized in terms of appearance, pH (potentiometric method) and speadability (Ojeda-Arbussa extensiometric method).

Results: The contents of flavonoids, phenolcarboxylic acids, mucilages and essential oil of raw materials are comparable to those cited in accesed databases. Loss on drying of the extract is less than 5.0%, and the contents of flavonoids and phenolcarboxylic acids are high. The finished product is a homogeneous gel, with pH 5.0 and a good plasticity.

Conclusion: The current formulation may be regarded as a new therapeutic solution in treating bruises (ecchymosis), but further pharmacological studies are needed to confirm or decline this hypothesis.

ID401 Pharmacognostical Researches Regarding Indigenous Allium Ursinum Leaves

Maria Lidia Popescu[1], Ligia Elena Dutu[1], Emanuela Alice Luta[1], Liliana Costea[1], Elena Iuliana Ilie[1], Cerasela Elena Gird[1]

[1]Faculty of Pharmacy - Department of Pharmacognosy, Phytochemistry and Phytotherapy, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Allium ursinum L. (bear's garlic), is a spontaneous herbaceous species belonging to Amaryllidaceae family, widespread in Europe (including Romania), which is known for its culinary and medicinal values.

Objectives: botanical characterization, evaluation of chemical composition and quantification of the main chemical compounds of indigenous Allium ursinum.

Material and methods: The herbal drug consists of young (edible) and mature bear's garlic leaves, collected from Baneasa Forest (Romania). For the identity checking and quality determination the pharmacognostic analysis was applied. The herbal drug was successively extracted with ethyl ether, methanol, and purified water. After that, specific reactions, spectrophotometric and chromatographic methods have been applied for chemical evaluation.

Results: The microscopic examination revealed the presence of characteristic, large, round stomata with four subsidiary cells; trichomes and calcium oxalate were not identified. Both in young and mature leaves, the following compounds were identified: carotenoids, sterols, flavones, polysaccharides (mucilages), non-alkaloid nitrogen compounds, sulfur-containing compounds. By steam distillation of fresh leaves, a viscous, brown fraction with an unpleasant odor was separated (0.2 ml / 100g young leaves, and 0.1 ml / 100g mature leaves respectively). TLC analysis revealed the presence of more spots corresponding to compounds with flavones behavior (yellow fluorescense and color) in mature leaves, comparated to that in young leaves. A content of 0.361 - 0.398 % of flavones (expressed as rutin) was found in young edible leaves, and 0.304 - 0.356 % in mature leaves respectively.

Conclusion: The young edible Allium ursinum leaves have a higher content of volatile compounds, comparated to the mature leaves. The content of flavones decreases slightly during flowering, but the number of compounds with flavone behavior increases.

ID414 Sulfonamide Derivatives - New Therapeutic Valences

Diana Camelia Nuta[1], Carmen Limban[1], Irina Zarafu[2], Camelia Elena Stecoza[1], Carmellina Daniela Badiceanu[1], Maria Coanda[1]

[1]Faculty of Pharmacy, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]University of Bucharest, Faculty of Chemistry, Department of Organic Chemistry, Biochemistry and Catalysis, Bucharest, Romania

Objectives: Sulfonamide functionality is a widely used motif in medicinal chemistry and drug discovery. Sulfa drugs have shown a long history of use in therapy and their structural diversity has led to a wide range of pharmacological properties such as antibacterial, diuretic, antidiabetic, antiglaucoma, antiinflammatory, antipsychotic, anticancer, antiviral, anticonvulsant etc. Their versatility makes them very tempting candidates for drug development.

This study focuses on the microwave assisted synthesis of a new Schiff base, derived from sulfanilamide, its structural and in silico analyses to evaluate its therapeutic and toxicological profiles.

Methods and Materials: The reaction was carried out using Biotage Initiator 2.0, applying an optimized synthesis method. The condensation reaction gave 4-{(E,Z)-[(3,5-dihydroxyphenyl)methylidene] amino}benzene-1-sulfonamide. The demonstration of the synthesis was performed by determining spectral properties and melting point. Drug-likeness properties, prediction of biological activity and possible adverse reactions were assessed using prediction tools: SwissADME, PassOnline, SMP, ADVERPred and MetaTox.

Results: The spectral analysis of the compound confirmed the synthesis. SwissADME revealed that the molecule is druglike and leadlike and predicted good pharmacokinetic properties. Being a small molecule, PASS online indicated a variety of applications ranging from antimycobacterial, antiprotozoal (Coccidial), antihelmintic (Fasciola) to adenomatous polyposis treatment, cyclooxygenase-2 inhibitor, falcipain-3 inhibitor and so on. The predicted toxicological profile was similar to that of other sulfonamides (metabolic acidosis, allergic reactions, renal disfunction etc).

Conclusions: The present research aims to develop a new sulfonamide derivative with potential pharmacological action, obtained by microwave assisted synthesis. The compound has a favorable molecular profile for the appearance of a multitude of biological activities. These predictions need to be further verified by in vivo tests.

ID447 Synthesis, Characterization and Antitumor Studies of 5-aryl-1,3,4-Thiadiazole-2-amine Derivatives

Camelia Elena Stecoza[1], Miron Teodor Caproiu[2], Constantin Drăghici[2], Mirela Mihaila[3], Marinela Bostan[3], Diana Camelia Nuta[1]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]"Costin D. Nenitescu" Center of Organic Chemistry, Romanian Academy, Bucharest
[3]Center of Immunology "Stefan S. Nicolau", Institute of Virology, Bucharest

Objectives: 1,3,4-Thiadiazole core is a key structural component in heterocyclic chemistry and establishes a pharmacological scaffold in medicinal chemistry. Literature survey of 1,3,4-thiadiazole-2-amino derivatives revealed the fact that these compounds are well known for their antitumor properties. Hence, in the present study a series of title compounds was designed, synthesized and screened for their anticancer activity against various human tumor cell lines.

Method: The target compounds were obtained by heating under reflux of different aromatic carboxylic acids with thiosemicarbazide in the presence of phosphorus oxychloride. Some acids, precursors in synthesis, were prepared starting from thiophenols and phtalide. The in vitro cytotoxic activity was assessed by MTS assay on two standardized human tumor cell lines, HT-29 (colon adenocarcinoma) and MDA-MB-231 (breast adenocarcinoma) treated at different concentrations and times. Cisplatin (CisPt) and doxorubicin (DOX) were used as reference drugs.

Results: We have developed a one-pot synthesis of 5-aryl-1,3,4-thiadiazole-2-amine derivatives. The advantages of the protocol include easily available starting materials, simple reaction workup and convenient isolation. The obtained compounds were well characterized by elemental and spectral analysis (^{1}H-NMR, ^{13}C-NMR, FT-IR). The response to treatment with the tested compounds is different on the two cell lines. The in vitro compound-mediated cytotoxicity assays demonstrated dose- and time-dependent cytotoxic activity for several compounds, the highest anti-tumor properties being assessed for compound T1T, compared to the other derivatives studied.

Conclusions: The compound T1T presented the best antitumor profile indicating the importance of the substitution at C-5 position. It is established that the presence of phenyl-thiomethylphenyl unit is essential for the activity.

ID454 Formulation and Production of Semisolid Topical Preparation Based on Colostrum and Vegetable Oils

Teodora Balaci[1], Catalina Ancuta Fita[1], Emma Adriana Ozon[1], Catalin Mihai Balaci[1], Georgiana Mihaela Ioan[1]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

This study aimed to develop dermato-cosmetic products based on colostrum and vegetable oils for the regeneration of injured tissue and its healing. Our purpose was to highlight the properties of colostrum in combination with vitamins and vegetable oils and to test the stability of the active ingredients in different cream bases. The qualitative and quantitative composition of four creams and one gel was determined. In all the preparations we combined colostrum with ingredients such as hyaluronic acid, vegetable oils and vitamins. For good homogenization, the freeze-dried bovine colostrum was dispersed with the oils and incorporated into the selected bases. We have determined the organoleptic characteristics, the pH (potentiometric method), the spreadability (Ojeda-Arbussa extensometer method), the viscosity (rotational viscosimeter), and the skin moisturizing ability (corneometer). Determinations were made immediately after preparation and after certain periods of time to show stability. The experimentally obtained preparations have a homogeneous appearance, characteristic colour of the components and pleasant odor; the pH is in the range 5,9-6,7 values which are compatible to the skin with optimum rheological behaviour and an appropriate consistency, plus the skin hydration is much improved. The obtained pharmaceutical preparations were made mostly with natural components, and the association with vegetable oils makes them ideal products for the treatment of wounds, during the healing process, for sensitive, dehydrated skin or for skin prone to wounds, colostrum alleviating irritation, stimulating skin reconstruction and improving its resistance to infection. This ensures faster skin regeneration and supports the natural healing process. Due to its healing and tissue regeneration properties, it is expected that in the future there will be an increase in the use of colostrum–based preparations in the treatment of wounds and burns.

ID462 Synthesis, Characterization, Crystal Structure and Acute Toxicity Evaluation of Cu(II), Co(II), Mn(II), Ni(II), Pd(II) Complexes of a Schiff Base Derived from 3-formyl-6-methyl-chromone

Andreea-Gabriela Verde[1], Sergiu Shova[2], Stefania-Felicia Barbuceanu[3], Codruța Paraschivescu[4], Mihaela Badea[5], Theodora-Venera Apostol[3], Laura-Ileana Socea[3], Mihaela Dinu[6], Robert Viorel Ancuceanu[6], Doina Draganescu[7], Cristina-Elena Dinu Pirvu[8], Elena Mihaela Pahontu[9]

[1]Emergency County Clinical Hospital, Bucharest, Romania;
[2]Institute of Macromolecular Chemistry „Petru Poni", Iasi, Romania;
[3]Faculty of Pharmacy, Organic Chemistry Department, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[4]University of Bucharest, Faculty of Chemistry, Organic Chemistry Department, Bucharest, Romania;
[5]University of Bucharest, Faculty of Chemistry, Inorganic Chemistry Department, Bucharest, Romania;
[6]Pharmaceutical Botany and Cell Biology Department, Faculty of Pharmacy, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[7]Faculty of Pharmacy, Pharmaceutical Physics Department, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[8]Faculty of Pharmacy, Physical and Colloidal Chemistry Department, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[9]Faculty of Pharmacy, General and Inorganic Chemistry Department, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objectives: Schiff bases are most extensively used chelating coordination ligands. The special biological properties, affinities for protons, optical properties and degree of aromaticity of chromone derivatives have attracted attention both theoretically and experimentally. Schiff base of 3-formyl chromone and its complexes have a variety of applications in biological, clinical and pharmacological areas.

The aim of this work was the synthesis of some Cu(II), Co(II), Mn (II), Ni(II), Pd(II) complexes with a ligand derived from 3-formyl-6-methyl-chromone, characterization and investigation their acute toxicity.

Methods: The Schiff base was obtained by refluxing in ethanol an equimolar amount of 2-chloro-5-(trifluoromethyl) aniline with 3-formyl-6-methyl-chromone. By its reaction with the corresponding metal salts, five complexes were synthesized. The composition and structure of these compounds was determinated on the basis of data from elemental and thermal analysis, IR, ^{1}H, ^{13}C NMR, UV-Vis spectroscopy, magnetic susceptibility measurements and molar electrical conductivity. In addition, the structure of the palladium complex has been determined by single-crystal X-ray diffraction analysis. The ligand and complex combinations were tested for acute toxicity on the species: vegetable Triticum aestivum L. and animal - crustacean Artemia franciscana Kellogg.

Results: The structure of the new complexes was confirmed by the physico-chemical analyzes performed. The Schiff base act as a mononegative bidentate ligand coordinating to the metal center through the O–N chelating system. Both the ligand and the complexes inhibited the development of the root system of Triticum aestivum L. seedlings in a concentration-dependent manner, with no significant differences between them. A reduced effect may be present in the case of Co (II) and Pd (II) complexes. Toxicity of compounds on Artemia franciscana Kellog nauplii showed similar values, their toxicity proving to be moderate.

Conclusions: The research undertaken makes an important contribution to the diversification of Schiff-based metal complexes with low toxicity and potential biological activity.

ID478 Studies regarding Hypoglicaemic Solid Pharmaceutical Products containing Vegetal Extracts and Powders

Teodora Balaci[1], Cerasela Gird[1], Ligia Dutu[1], Catalina Ancuta Fita[1], Emma Ozon[1]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

The aim of this study is to formulate and develop technological processes on a laboratory scale, in order to obtain solid pharmaceutical products (hard gelatin capsules and tablets) containing plant extracts/powders with hypoglycemic potential. Several experimental formulations were developed, each containing combinations of plant extracts / powders obtained from the following plant products: Salviae folium, Phaseoli fructus, Urticae folium, Mori folium, Juglandis folium, Myrtilli fructus and folium, Momordicae charantiae fructus, Cynarae folium, Alli cepae bulbus, along with vegetal powders (Curcumae pulvis, Cinnamomi pulvis) and different excipients having well-defined technological roles. We have selected these vegetal products because phytocomplexes can induce a hypoglycemic effect through multiple mechanisms: reducing intestinal glucose absorption, regenerating and stimulating beta-pancreatic cells, inhibiting insulinase, improving insulin resistance, increasing peripheral glucose utilization, influencing hepatic glucose metabolism, etc.

A series of physical parameters of the **materials used** to fill the hard gelatin capsules or subjected to compression were analyzed: flow rate, bulk and compaction density, Haussner ratio and Carr index. The hard gelatin capsules and the tablets were prepared by technological processes on a laboratory scale and the quality control was performed on the finished products by determining the uniformity of mass, disintegration time, height, mechanical strength, friability.

The results of the preliminary research on the formulation and obtaining on a laboratory scale will be corroborated with the preclinical and clinical experimental results.

ID506 The Study on Obtaining some Topical Preparations Used in Seborrheic Dermatitis

Catalina Ancuța Fita[1], Dumitru Lupuliasa[1], Emma Adriana Ozon[1], Ana Andreea Secăreanu[1], Teodora Dalila Balaci[1]

[1]Faculty of Pharmacy - Department of Pharmaceutical Technology and Biopharmaceutics, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objectives: Seborrheic dermatitis is an inflammatory, chronic skin disease that affects a large number of adults and newborns.The objective of this study was the preparation and evaluation of topical preparations used for the treatment and/or prevention of seborrheic dermatitis, both of the face and of the scalp, with natural ingredients with antiseborrheic, healing and nourishing action. Active ingredients with increased efficacy and lower irritant action, than the commonly used semi-synthetic and synthetic ingredients, were included. Essential oils were used: Tea tree, thyme, rosemary. grapefruit, sage, mint, rose (0,5-3%), vegetable extracts: willow and Centella asiatica (1%) and vitamin E, along with squalan, coconut oil, aloe gel.

Materials and methods: Two O/W creams were made, an emulgel (with 1% carbopol) and a liquid shampoo justifying the choice of natural active ingredients (essential oils, fixed oils, vitamins, plant extracts) and excipients (partly natural). Immediately after preparation and at a certain time interval, the following determinations were performed for the resulting preparations: organoleptic control, pH determination (potentiometric method), plasticity determination (Ojeda Arboussa method). To control the in vivo performance of the preparations, the influence of their application on the degree of skin hydration (Corneometer CM825), on the amount of sebum in the skin (Sebumeter SM815) was studied and the melanin and erythema index of the skin (Mexameter MX18) was determined.

Results: From the determinations made, the creams and emulgel had a good plasticity and stability, reduced the amount of sebum, moisturized the skin, decreased the degree of erythema, without negatively influencing the physiological pH, and the shampoo proved to have good foaming properties and to remove dirt and sebum.

Conclusions: The results being good, these topical preparations can be starting points in order to obtain products used in the treatment / prevention of seborrheic dermatitis.

ID564 Design and Evaluation of Some Dermatocosmetic Emulsions Based on Niacinamide, Collagen Hydrolysate and Vegetable Oils

Diana-Georgiana Ionescu[1], Mihaela Violeta Ghica[1], Madalina Georgiana Albu Kaya[2], Cristina-Elena Dinu-Pirvu[1], Lacramioara Popa[1], Valentina Anuta[1], Elena Dănila[2], Durmus Alpaslan Kaya[3], Ciprian Chelaru[2], Razvan Mihai Prisada[1]

[1]Faculty of Pharmacy, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Division Leather and Footwear Research Institute, National Institute for Textile and Leather Research and Development, Bucharest, Romania
[3]Faculty of Agriculture, Mustafa Kemal University, Antakya- Hatay, Turkey

Objectives: The goal of this work was to develop and evaluate some oil/water emulsions, with potential use in various dermatological conditions. The designed formulations are based on a synergistic mixture of collagen hydrolysate, providing the construction base for the formation of elastin and collagen, niacinamide with anti-aging, anti-acne, regenerating, depigmentation properties, and vegetable oils (avocado, almond and jojoba) with emollient, keratinizing and regenerating effect.

Materials and method: Dermatocosmetic formulations were analyzed in terms of organoleptic characteristics, pH values, morphological, superficial and flow properties. The stationary rheological determinations were carried out at 24 and 32°C, obtaining the viscosity as a function of shear rate flow profiles, respectively shear stress as a function of shear rate upward and backward rheograms.

Results: The organoleptic examination provided information about color, appearance and smell, being releted to the formulations composition. The morphological analysis indicated a homogeneous structure for all emulsions and a foam-like appearance. The surface profile was quantified by the contact angle at the S/L interface. The goniometric analysis showed an increased emulsions hydrophilicity, with direct implications in teguments hydration capacity. The emulsions presented a non-newtonian pseudoplastic and thixotropic behavior at both working temperatures, facilitaing the formulation operations flux and topical application. The flow properties of the emulsions were quantified by the Power law model, and the thixotropic behaviour by thixotropic area and thixotropic index.

Conclusions: Considering the results obtained, it can be concluded that the deisgned emulsions could be a natural alternative to obtain functional cosmetics as anti-aging and anti-acne products with a synergistic action to reduce wrinkles determined by body's natural aging process, and also to regenerate the skin.

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ID590 Molecular Docking Studies on a Library of Thiourea Chemicals

Roxana Roman[1], Diana Nuta[1], Lucia Pintilie[2], Carmen Limban[1]

[1]Department of Pharmaceutical Chemistry, Faculty of Pharmacy, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania;
[2]National Institute of Chemical-Pharmaceutical Research and Development, Bucharest, Romania

Objectives: New pharmaceutical drugs were intended to be developed in the recent years due to the growing resistance to the overused medicines.

Among them, a significant number of compounds with pyridine scaffolds have been synthetized. The area of indications is related to infections, nervous system, oncology, inflammation.

In the present study, a synthetic strategy has been developed, implying thiourea and pyridine moieties. The aim has been to develop new analogues that imply a known chemical template, resulting in pharmaceutical leads as chemical products.

Methods: In connection with the efforts framed for refining novel chemical candidates, a versatile library of 16 chemical compounds, thiourea and/ or pyridine-based chemicals, are evaluated concerning their QSAR applications.

The molecular properties are determined through Spartan 14 analysis, based on Density Functional algorithm, for equilibrium energy, at ground state: DFT B3LYP method, basic set 6-31G*.

CLC Drug Discovery Workbench software has been used for docking purpose. The path is represented by a computational simulation commonly referred to as orientation between ligand and protein, with their rectified, optimized posing, when the free energy is minimized.

Results: The out-turn is constituted by docking scores, along with the hydrogen bonds established with the amino acids in the interaction group; the results are interpreted in the matter of affinities, prediction of bonding models, orientation of the developed compound in the suitable active site of receptor protein.

The molecular docking simulation of thiourea derivatives on Staphylococcus aureus DNA gyrase and Escherichia coli DNA gyrase has been carried out. All designed structures have demonstrated a strong affinity with the protein receptors, via H – binding and docking score.

Conclusion: The evaluation of the data underlies the hypothesis that the thiourea derivatives could be considered potential nominees for further research, targeting the antibacterial properties.

ID398 Comparative Study Of Serous Carcinoma Of The Female Reproductive System

Manuela Popa[1], Maria Sajin[1]

[1]*Pathology Department, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Objective: Serous epithelial malignancies develop frequently in the female reproductive organs. So far, their origin has been debated but not elucidated, and studies in the field have proposed different etiopathogenic mechanisms within the same histological type and have led to their subclassification into high-grade and low-grade serous carcinomas. Our objective was to evaluate if these subtypes have common or different characteristics depending on their location.

Method: We present an analytical study of cases diagnosed in a period of 4 years: 102 cases of the ovary, 12 cases of the salpinx and 31 cases of the uterus; we analyzed the distribution of the tumor subtype, the expression of immunohistochemical markers with diagnostic and prognostic role.

Results: High-grade histological features were present in: 83.3% of ovarian serous carcinomas, 91.6% of salpingeal serous carcinomas and 70.9% of uterine serous carcinomas. ER expression> 50%: 34.31% of cases with ovarian localization, 50% for the salpinx and 35.48% for the uterus. WT1 was positive in all cases of ovarian tumors, negative in 1 case of salpingeal tumor and in 3 cases of uterine tumors. We identified aberrant immunohistochemistry expression for p53 in 36% of cases of low-grade serous ovarian carcinomas.

Conclusions: Our results indicate that high-grade serous carcinomas are more common than low-grade, regardless of their location in the female genital organs. ER receptors seem to be a common down-regulation feature of the serous tumor type. Further molecular studies are needed to investigate the possibility of the P53 gene mutation in some cases of low-grade serous carcinomas.

ID424 Virulence Factors of Fungi Strains Isolated from Intesive Care Units Patients

Iulia-Ioana Sentes[1], Bianca Trusca[2,3], Madalina Preda[1,4], Mara Lia Ditu[3], Mircea Ioan-Popa[1,5]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Fundeni Clinical Institute, Bucharest, Romania*
[3]*Department of Botany and Microbiology, Faculty of Biology, University of Bucharest, Romania*
[4]*Marius Nasta National Institute of Pneumology, Bucharest, Romania*
[5]*Cantacuzino National Military Medical Institute for Research and Development, Bucharest, Romania*

Objectives: Fungi are opportunistic agents that can cause infections, usually in patients with severe immunosuppression and have become one of the biggest problems of contemporary medicine especially due to the growing resistance to antibiotics. The aim of this study was to characterize the virulence factors that mediate their success as pathogens, such as: dimorphism, biofilm formation, adherence and invasion, production of soluble virulence factors (e.g. proteases, lipases, haemolysins).

Method: The study included 20 strains of fungi isolated from patients admitted in intensive care unit. The taxonomic identification was done using classical microbiological methods. The production of soluble virulence factors was evaluated by streaking the strains on different Sabouraud media, supplemented to detect caseinase, protease, phosphatase, lecithinase, gelatinase, hemolysins. The cell adherence and cytotoxicity were analyzed through inoculation of strains on HEp-2 cell cultures.

Results: Among the 20 isolates, 12 were identified as C. albicans, 2 as C. parapsilosis, 2 as C. tropicalis, 2 as C. krusei, 1 as C. glabrata and 1 as Trichosporon asachi. 35% fungus produced caseinase, 95% protease, 50% phospholipase, 20% gelatinase. In 55% of the fungi strains the adherence to cell culture was high, while the rest of it has moderate adhesion (20%) and insufficiently adhesion (25%) to confluent monolayers. 35% had morphological transformation such as hyphae, germination tubes and double wall.

Conclusion: Taking into account all virulence factors and adherence capacity of fungal species, it is emphasized once again the central role they play in the pathology of immunocompromised patients.

ID425 Knowledge and Attitude in Women with Urinary Tract Infections

Askin Sibel[1], Madalina Irina Mitran[1], Cristina Iulia Mitran[1], Mircea Ioan Popa[1]

[1]*"Carol Davila" University of Medicine and Pharmacy Bucharest, Romania*

Background: Recurrent urinary tract infections (UTIs) are a major public health issue worldwide. It is estimated that approximately 50-60% of women develop at least one episode of UTI in their lifetime, with almost half of these women experiencing a recurrence in 6-12 months. The aim of our study was to assess the deficiencies in the management of UTIs in terms of prevention and appropriate treatment among adult women in Romania.

Material and method: We have applied a questionnaire to 71 women with a history of at least one episode of UTI, between December 2021-April 2022. The questionnaire was composed of 29 questions. Data were collected using a self-administered electronic questionnaire distributed by email and on-line, through social media. The questions were created using the Google Forms tool and were organized into 4 sections: demographic data, medical history and habits, data about the episode / episodes of UTI and knowledge about UTI.

Results: Most of the participants were between 20 and 34 years of age and described uncomplicated UTIs. A percentage of 30.1% of them stated that they had between 1 and 3 episodes of UTI per year. There was a negative correlation between the amount of fluid consumed daily and the frequency of UTIs. An increased number of women (17%) chose to self-administer antibiotic treatment without prescription and a significant percentage of them stopped antibiotics with symptoms remission (14.9%) before the recommended period of time. We observed a shortage of knowledge about preventive methods and risk factors associated with UTIs among women who completed this questionnaire.

Conclusion: The results of our study indicate that it is necessary to implement educational programs for adult women in Romania to prevent and properly manage UTIs.

ID440 Digital Tools for Mental Health Wellbeing

George Suciu[1], Adrian Pasat[1], Cosmina Stalidi[1]

[1]*Beia Consult International - R&D Department, Bucharest, Romania*

Objectives: Work stress is associated with a higher risk of clinical depression among employees posing many health issues such as heart disease, obesity, diabetes, etc.

Digital tools can detect and mitigate poor mental health conditions, such as work stress and burnout, that further translate in an increased absenteeism rate. Mad@Work project proposes a software platform based on a multimodal approach using environmental and wearable data sources into actionable information for improving employees' wellbeing, engagement, and performance.

Methods: The Mad@Work software suite is based on the following applications (that are similar to an organizational barometer):

- SelfQuestionnaire app - short questionnaires will be developed to obtain a variety of data, targeting the workforce in an easy and engaging approach.
- VirtualSensor application - here we hypothesized that stress is associated with a speed-accuracy trade-off in keyboard and mouse movements. This application collects anonymized data, once the user performs the login with the test account.
- Wearable Devices Health API is another essential software tool. This service allows the participants in the study to share the data generated by their activity tracking devices.

Results: The pilot study designed by the Romanian consortium started in January this year and will last for a one-year period. The participants are 32 students that are enrolled in a IT&C company internship program. After achieving a first demo for the wearable devices' data acquisition and a data presentation module, our work is focused now on data analysis and personalized recommendations based on the multimodal approach.

Conclusions: To summarize, we present the capabilities that IoT data offers for many health-related applications.

While the pilot study is yet to be finalized, we managed to ensure project continuation in the Aicom4health project consortium where the main focus is related to AI enhancement for the SW tools proposed.

ID445 The Importance of Lifestyle in Diabetic Patients

Alexandru Agliceru Finley[1], Bogdana Vîrgolici[1], Horia Virgolici[1], Stefan Daciana Costina[1]

[1]Department of Biochemistry, "Carol Davila" University of Medicine and Pharmacy Bucharest, Romania

Diet and practicing sport are important in both preserving good health and keeping diabetes mellitus under control.

The aim of this study is to assess the lifestyle of diabetic patients according to a 12 questions questionnaire and correlate the results with some parameters of dysmetabolism.

Type 2 diabetic patients (n=107) were divided into two groups according to the answer to this question: "At the moment do you think that you are in control of your diabetes?". Group A (assumed) answered "Yes, I am!", while group U (unassumed) answered "I am in partial control of my disease" or did not answer at all.

From the entire batch of 107 patients only 40% were instructed by a physician to practice sport as part of their treatment and only 30% of smokers (n=30) have given up smoking.

Group U versus group A had higher values for: fasting glycemia (203 vs 128 mg/dl, $p<0.01$), HbA1c (7.8% vs 6.7%, $p<0.02$), BMI (30 vs 27 kg/m^2, $p<0.05$) and HOMA-IR and HOMA-β ($p<0.05$).

In conclusion, the rules for a healthy lifestyle are not followed by most of the diabetic patients and the consequences are staggering.

ID446 The Abnormal Ankle-Brachial Index in Type 2 diabetic patient - a Red Flag

Alexandru Agliceru Finley[1], Bogdana Virgolici[1], Horia Virgolici[1], Ștefan Daciana Costina[1]

[1]Department of Biochemistry, "Carol Davila" University of Medicine and Pharmacy Bucharest, Romania

Values for the ankle-brachial index (ABI) above 1.4 suggest a noncompressible, calcified vessel. A value below 0.9 for ABI is considered diagnostic for peripheral artery disease.

The aim of this study was to find correlations between ABI values and dysmetabolism parameters in type 2 diabetic patients.

Sixtyfive diabetic patients were divided in two groups according to ABI values. The group ABIN (n=35) had normal ABI (1-1.4) and group ABIP (n=12) had abnormal (pathologic) values.

For all the diabetic patients the ABI was positively correlated ($p<0.05$) with HbA1c ($r=0.42$), with BMI ($r=0.26$) and with HOMA-IR ($r=0.36$) values.

The ABIP group vs ABIN group had higher values for HbA1c (7.45% vs 6.85%, $p<0.02$), HOMA-IR (8.11 vs 5.18, $p<0.05$), BMI (30.4 vs 27.6 kg/m^2, $p<0,05$) and lower HDL (44.3 vs 51.9 mg/dl, $p<0.05$).

In conclusion, the ABI is a quick and noninvasive method which shows the strong cluster acting of insulin resistance, dyslipidemia and dysglycemia for atherosclerosis development in type 2 diabetic patients.

ID449 Antimicrobial resistance profile of strains isolated from urinary tract infections

Silvia Elena Apostol[1], Madalina Preda[1,2], Loredana Cornelia Sabina Manolescu[1,3]

[1]*"Carol Davila" University of Medicine and Pharmacy Bucharest, Romania*
[2]*Marius Nasta Pneumology National Institute, Bucharest, Romania*
[3]*Stefan S. Nicolau Institute of Virology, Bucharest, Romania*

Objectives: Antimicrobial resistance is an important contemporary problem, especially in patients with other comorbidities. The objectives of this study included the clinical picture of patients with urinary tract infections, identification of microorganisms involved and characterization of antimicrobial resistance profile of patients with urinary system afflictions.

Methods: We designed a retrospective study in which we included patients admitted in Prof. Dr. Th. Burghele Clinical Hospital, with the diagnosis of urinary tract infection. The diagnosis was established based on the laboratory results of the urine culture. The clinical data and laboratory results were collected and analysed.

Results: Thirty patients were included in the study, 30% male and 70% female. Most frequent admission causes were urinary retention, bladder tumour, benign prostatic hyperplasia and other urinary system afflictions. The patients had multiple comorbidities, most of them were cardiac and circulatory system, namely chronic ischemic heart disease and hypertension. Pathogens identified were: Pseudomonas aeruginosa (21%), Klebsiella spp. (24%), Escherichia coli (35%), Enterococcus spp. (10%), Staphylococcus spp. (4%), Acinetobacter spp. (3%) and others less common. Regarding the resistance to antimicrobials, most of the Pseudomonas aeruginosa strains were resistant to fluoroquinolones, Enterobacteriaceae to penicillins, Staphylococcus spp. to fluoroquinolones and methicillin.

Conclusions: Although in general the urinary tract infection is more frequent in female, in our study, a higher frequency of male was noticed. Regarding the diagnosis of admission, various pathologies have been encountered, the most common of which, being, the retention of urine and the benign prostatic hyperplasia. Most frequent identified microorganisms were Pseudomonas spp. and Enterobacteriaceae.

ID463 Are Community Health practical assignments a challenge for the year IV medical student?

Andreea Steriu[1], Eugenia Claudia Bratu[1], Geovana Calinoiu[1], Nicoleta Valentina Cioran[1], Dana Galieta Minca[1]

[1]*Faculty of Medicine, "Carol Davila" University of Medicine and Pharmacy Bucharest, Romania*

Abstract: Background: community health is a new eight-week linear module in the fourth year of the undergraduate medical curriculum in UMF Carol Davila, Faculty of Medicine. It was first introduced in the 2020/2021 academic year. It consists of seven lectures, seven practicals, a practical assignment and a written exam. For the practical assignment students choose to address a medico-social problem with a project with the assignment delivered by week seven. The final mark includes this assignment (max 20% of the final mark).

Objectives: to analyse the selected project themes by group of students; to assess and evaluate the quality of submitted community health themes as part of the practical exam; to propose improvements to educational objectives based on concordance between the medico-social problem and the methodological component of the project proposal.

Methodology: is qualitative with year IV medical students during the 2021/2022 year. Data collection (October 2021 to June 2022) was carried out with a Google Form template. The Form consists of an introductory part (medico-social problem, community and background rationale of the chosen theme); a second part with ten published papers (bibliographic format) and a methodological proposal consisting of five outcomes, methods of measurement; sources of data.

Results: A total no. of 245 students (36 groups) completed the assignment: 30 groups were selected in the first semester (RO); six groups in the second semester (EN). Chosen themes vary widely both for the selected problem (communicable or non-communicable disease) and for the community (by residency, vulnerability, age group, sex). Minor discrepancies were observed between the type of outcome and its method of measurement which led to subtraction of marking points for 24 out of 36 groups.

Conclusion: this was the second year of a taught community health module. For quality improvement purposes of the practical assignment some educational objectives need refinement.

ID464 COVID-19 Pandemic in the Medical Students Community - an Evolution of Public Health-related Knowledge, Behaviour, Attitudes and Risk Perception, Over the Course of the First 6 Months of Lockdown

Andrada-Raluca Artamonov[1], Andreea Steriu[1], Dana Galieta Minca[1]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Background: COVID-19 has had a profound impact on practical, hands-on learning in higher education systems.

Objectives: To analyse responses of medical students about knowledge, behaviour, attitudes and risk perception related to SARS-CoV-2 and COVID-19 during the first 6 months of the pandemic; to evaluate potential changes of behaviour and attitudes which occurred after the period of state of emergency.

Methods: This research is a cross-sectional descriptive opinion poll, conducted with an online questionnaire on the Google Forms platform, aimed at medical students enrolled in Carol Davila University of Medicine and Pharmacy (UMFCD). Data collection took place during 14-20.11.2020. The self-assessment questionnaire contains 45 items organised in four sections for two points: March 2020 and November 2020. Data analysis was performed with Microsoft Office 365 Excel and IBM SPSS 23.0.

Results: A total of 191 students participated. With regards to public health-related non-pharmacological interventions definitions of key concepts and their understanding registered a substantial change between March and Novemebr 2020: from 10% to 89%. Low access to reliable information was reported by 17%. Widespread behavioural changes included hand hygiene, cough ettiquette, mask wear. Less change was noted for: habitual touch of one's face (nose, mouth, eyes), glove wear, regular temperature self-check. Attitudes towards public health measures were entirely approbatory (0% reported that they are completely useless). Almost all respondents (96%) expressed a strong moral healthcare duty. Infectious risk perception changed with time: the interest shifted from self protection (from 92.67% to 85.86%) to shielding family, friends (from 60.20% to 93.71%) and society (from 26.18% to 75.39%).

Conclusions: The COVID-19 pandemic reflects levels of learning for public health-related knowledge, behaviour, attitudes and infectious risk perception, in UMFCD medical students. This was observed at a 6-month timeline from the start of the pandemic with differences for specific prophylactic non-pharmacological practices during this time.

ID469 Improving the Environment Inside Public and Semi-public Smart Toilets Using IoT Devices

Oana Orza[1], Cristina Sabina Bosoc[1], Filip Osiac[1], Cristina Mihaela Balaceanu[1], George Suciu[1]

[1]*R&D Department, BEIA Consult International, Bucharest, Romania*

Objectives: The present study is based on the research performed in Toilet4Me2 project and has as main objective to monitor the level of cleanliness in public and semi-public toilets using Internet of Things technologies. Another objective is to improve the experience inside a toilet, as the system can detect if the smell and degree of dirtiness exceeds a certain threshold. A final objective is to alert institutions in charge of cleanliness inside toilets, so that they can intervene in a timely manner to restore citizens to a clean toilet with a pleasant environment.

Methods: The solution integrates both the hardware and the software side as the data collected from IoT sensors will be sent via the MQTT protocol to a web platform. The platform will allow real-time visualization of the data in the form of graphs displaying the parameters being monitored in the toilet. The proposed solution differs from existing implementations by the fact that the threshold at which it will start alarming the cleaning staff will be automatically calibrated, requiring that when it is installed, the toilet should be clean.

Results: The solution has been tested and has successfully monitored the levels of NH_3, H_2S and CO_2, which are the most representative gases that can give the cleanliness level of a toilet. The prototype was tested in a semi-public toilet and the results confirmed that the proposed solution is sensitive enough and reacts when the toilet is left dirty.

Conclusions: Considering the proposed solution, different options for monitoring the cleanliness level of the toilet and the toilet seat were analysed. Following the tests carried out, it was verified that (semi)public toilets became more and more used by all categories of citizens because their level of cleanliness increased significantly following the implementation of the mentioned solution.

ID470 Academic Performance and Psychological Correlates in Medical Students

Alexandra Ioana Mihailescu[1,2], Irina-Laura Oana[1], Iulia-Irena Dayeh[1], Liliana Veronica Diaconescu[1], Ovidiu Popa-Velea[1]

[1]Department of Medical Psychology, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Clinical Hospital of Psychiatry Prof. Dr. Alexandru Obregia Bucharest, Romania

Objective: We aimed to assess psychological factors, including personality traits, that affect medical students' academic performance.

Method: We analyzed transversal data of 213 medical students (40 men, 173 women, mean age=24.97, SD=2.39) enrolled in the University of Medicine and Pharmacy "Carol Davila" in Bucharest who agreed to participate in the study. They completed the Big Five Inventory-2 (ES-form), the Depression, Anxiety and Stress (DASS-21) scale (Lovibond et al., 1995), the Short Dark Triad scale (Paulhus et al, 2014), the Satisfaction with Life Scale (SWLS) (Diener et al., 1985) and a survey including questions socio-demographic data and the average grade at admission and/or the precedent year of study. Data analysis comprised t-test and linear regression. The threshold of statistical significance was $p < .05$.

Results: Participants with above average academic performance had (1) a lower level of neuroticism ($t(70) = -2{,}568$, $p < 0.05$); (2) low prevalence of depression ($t(70) = 1{,}792$, $p < 0.05$), anxiety ($t(70) = 2{,}199$, $p < 0.05$) and perceived stress ($t(70) = 2{,}187$, $p < 0.05$); (3) a high degree of satisfaction with life ($t(70) = -2{,}433$, $p < 0.05$). Furthermore, we did not detect a significant association between academic performance and personality traits belonging to the dark triad ($p > 0.05$). A significant linear regression equation was found between the previous year's average and the scores for Conscientiousness, $R = 0.2064$, CI [0.044-0.358] and for SWLS, $R = 0.2685$, CI [0.11-0.41].

Conclusion: Academic performance in medical students contributes to advancement in professional endeavors but can also be a source of stress, anxiety, or depression, which can create a vulnerability for mental health issues for future doctors. These findings may be instructive for designing undergraduate medical programs that strengthen academic environments' resilience and further improve academic performance.

ID483 Extensively Drug-resistant Microorganisms Prevalence and Trend in Time

Madalina Preda[1,2], Mirela Angelica Dica[1], Lacramioara Sarbu[1], Monica Ionita[1], Adina Mazilu[1], Oana Popescu[1]

[1]Marius Nasta Pneumology Institute, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objectives: Resistance to antimicrobial drugs is a significant threat, especially in patients with other afflictions and comorbidities. The main objectives of this study were to analyse: 1. the extensively drug-resistant (XDR) microorganisms, 2. the samples they were isolated from and 3. the trend of the prevalence over one-year period.

Methods: We retrospectively analysed the antimicrobial resistance pattern of the samples processed in the laboratory of the Marius Nasta Pneumology Institute between June 1st, 2021 and May 31st, 2022. The microorganisms non-susceptible to at least one antimicrobial agent in all but two or fewer antimicrobial categories were classified as XDR pathogens and they were further grouped depending on their taxonomy and sample.

Results: A total of 374 isolates were classified as XDR microorganisms. Of them 241 were isolated from bronchial aspirates, 61 from sputum, 23 from urine, 20 from pleural effusion, 15 from purulent secretion, 9 from blood and 5 from catheter tips.

Most frequent pathogens isolated from aspirates were Acinetobacter spp. (87), Staphylococcus spp. (51), Pseudomonas aeruginosa (49), Klebsiella pneumoniae (31). A seasonality of some strains has been observed, for example Acinetobacter spp. was more common from October to March, while Pseudomonas aeruginosa between September and November.

Conclusions: XDR pathogens were most frequently isolated from bronchial aspirates. The microorganism most often identified was Acinetobacter spp. A trend in time has been observed regarding the number of isolated microorganisms, but a longer period of study should be considered to further analyse this hypothesis. Close monitoring of the infections produced by XDR should be implemented in order to observe the magnitude and evolution of microbial drug resistance in respiratory pathogens.

ID505 The Perception of Adults who Have Been Institutionalized on the Methods of Integration into Society

Mirela-Alexandra Brezuica[1], Geovana Calinoiu[1], Andreea Steriu[1], Eugenia Claudia Bratu[1], Dana Galieta Minca[1]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Background: Despite understanding the importance, magnitude, causes and consequences of parental childcare deprivation, there is still little research reported in this area in Romania. Evidence based policies and social care programmes are in need of documented information to assist with protection of some of the most vulnerable individuals in our society.

Objectives: to assess the perception of children who have been institutionalized in a form of social protection; to evaluate their institutionalization type of care.

Methodology: descriptive, cross-sectional study, of adult persons who benefit or have benefited in their childhood from child protection social services. Setting: one county. The interview technique was used with a perception assessment structured questionnaire.

Results: There were n=682 children registered in social care in the county, of whom 252 were registered in a residential system, 334 in a foster family and 96 were in the care of other family members. Interviews were carried out with 27 individuals: 17 men and 10 women have answered to the structured assessment questionnaire. Institutionalized persons after their age of 10 (9 out of 27 respondents) have a more negative perception on their institutionalized period of life. Four people said they suffered from a form of physical abuse from carers, nine from educators and six of them described a form of emotional abuse from either category.

Conclusion: There is no ideal method of childcare outside of a family or parental home. Integrated care in a family-type of a social protection service comes next when it comes to quality of care. Young peoples' opinion regarding their life in an institution is a good one, overall, it gives them high levels of satisfaction. Despite the fact that most experienced some form of physical or emotional abuse, life under the protection of social services is a good one.

ID518 Glutatione Peroxidase - Evaluation of Oxidative Stress in Induced Ischemia

Livia Gratiela Mihai[1], Ioana Raluca Papacocea[1], Cătălina Mariana Ciornei[1], Ioana Anca Badarau[1]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Objectives: Intracellular antioxidant enzymes constitute a cellular defense against acute stress. We studied the ischemia injury in order to establish the protective role of glutathione peroxidase (GPx). Our studies have tracked the activity of antioxidant enzymes superoxide dismutase (SOD), catalase (CAT) and glutathione peroxidase (GPx) under oxidative stress conditions induced by ischemia.

Methods: The spectrophotometric methods used, allow the quantification of the production of reactive oxygen species after 1 hour (I1 Group), 2 hours (I2 Group), and 3 hours (I3 Group) of ischemic incubation. Results are expressed in mU/mg prot/min.

Results: GPx is an antioxidant enzyme that showed no statistically significant variation for the I1 Group (3.596± 0.053), for I2 Group (3.548± 0.054) and I3 Group (3.186± 0.051) vs. the Control Group (3.734± 0.054).

Conclusions: Under conditions of induced ischemia the GPx is not a marker of oxidative stress. The activity of this enzyme should be investigated together with other antioxidant enzymes such as catalase (CAT) or superoxide dismutase (SOD). The accumulation of hydrogen peroxide can be an aggressive agent but can trigger complex protection mechanisms. Ischemic tolerance may involve glutathione peroxidase (GPx) as a critical protective factor.

ID540 Fluorometer Adapted System for Studying the Effects of Anesthetic Gases on Lipid Vesicles

Andrei Ciumeica[1], Ioan Tivig[1], Bogdan Pavel[2], Mihaela Georgeta Moisescu[1], Tudor Savopol[1]

[1]Biophysics and Cellular Biotechnology Department, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Physiology Department, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objective: The purpose of this study was to develop and test a fluorometer cuvette-adapted system which meets the requirements of experiments performed under gases. The system was designed for studying the effects of xenon – an efficient anesthetic gas less used due to its high price – on biophysical properties of liposomes used as model for cell membranes.

Methods: The system, consisting of 3 pieces (a two-arm adapter for gases, a lid with a tube for liquids and a gasket for sealing), was modeled with Autodesk Fusion 360 software and then manufactured using a 3D resin DLP printer. Liposomes, synthetized from 1,2-dimyristoyl-sn-glycero-3-phosphocholine (DMPC), were fluorescently labeled with Laurdan and TMA-DPH and the parameters Generalized Polarization (GP) and Fluorescence Anisotropy (r) have been measured, respectively. The suspensions of liposomes were exposed to temperatures ranging from 15 to 45°C under controlled gas pressure (air, nitrogen, or xenon).

Results: The system proved to be sealed and allowed the measurement of GP and r under controlled gas pressure. A less sharp lipid phase transition of DMPC liposomes under xenon was observed when compared to air or nitrogen.

Conclusions: The system is functional, fulfills the requirements of a device working with gases (especially in terms of lack of leakage) and allows fluorescence measurements during the exposure of liposomes to the anesthetic. The system was originally developed for studying lipid vesicles, but it can be used for any fluorescence measurements under controlled gas atmosphere performed on suspensions, either artificial vesicles or living cells.

ID545 Consumption of Nutritional Supplements and Energy Drinks Among Bucharest Students from Medical, Psychological and Sports Profiles

Antoaneta Dragoescu[1], Andrei Boblea[2], Dana Galieta Minca[1]

[1]Discipine of Public Health and Management, Faculty of Medicine, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Department of Neurology, Schwarzwald-Baar Klinikum, Villingen-Schwenningen, Baden-Württemberg, Germany

Abstract: The consumption of nutritional supplements and energy drinks among students of the Faculty of Medicine, the Faculty of Psychology and Educational Sciences, the Faculty of Physical Education and Sports, from Bucharest, during the COVID-19 pandemic was different.

Objectives: a) Evaluation of students' behavior towards the consumption of nutritional supplements and energy drinks; b) Identifying the positive and negative effects of this consumption; c) Analysis of differences in product consumption according to faculty profile.

Methodology: An observational, descriptive study, with a transversal approach, carried out between October 2020 and June 2021. A random sample of 245 students from the final years of the 3 faculties, with an average age of 23.6 years ± 3.6 years, 73.9% female and 26.1% male (p=0.0395), was selected. The tool, an opinion questionnaire structured in 4 parts: food supplements (vitamins and minerals), protein supplements, energy drinks and coffee, aimed at: knowledge, quantity, frequency, positive and negative influences. Quantitative and qualitative analysis were used, and the Kruskal-Wallis test was applied for comparison.

Results: showed that more than 57% students consumed nutritional supplements based on vitamins and minerals (p=0.0183), on average 4 days/week. 10-32.8% students consume protein supplements as recommended (p=0.0010). 16-26% students consume energy drinks, 1-3 doses of 250 ml, 1-2 days/week, while coffee consumption is part of the daily life of the majority (p=0.0000). More than 75% students had the main effect of improving their physical and mental health, which led to a decrease in fatigue, stress and an increase in physical resistance to effort. Protein supplements provided protection against muscle wasting and improved athletic performance.

Conclusion: Students had a positive behavior towards the consumption of nutritional supplements, based on their beneficial effects, and a limiting behavior towards the consumption of energy drinks, based on the knowledge of adverse reactions.

ID550 In Vitro Experimental Data Regarding Health Effects of a Techirghiol Mud Extract on Fibroblasts Cell Cultures

Gelu Onose[1,2,3,4,5], Simona Isabelle Stoica[1,2], Cristina Popescu[1,2], Mihail Hoteteu[5,6,7], Constantin Munteanu[2,3,4,5,6,7]

[1]*Physical and Rehabilitation Medicine Department, Faculty of Medicine, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Neuromuscular Rehabilitation Clinic Division, Teaching Emergency Hospital "Bagdasar- Arseni", Bucharest, Romania*
[3]*Romanian Society of Physical and Rehabilitation Medicine & Balneoclimatology (RSPRMB), Bucharest, Romania*
[4]*Romanian Spinal Cord Society (RoSCoS), Bucharest, Romania*
[5]*Romanian Society of Neuro-Rehabilitation (RoSNeRa), Bucharest, Romania*
[6]*Romanian Association of Balneology (ARB), Bucharest, Romania*
[7]*Biosafety LTD Bucharest, Romania*
[8]*Faculty of Medical Bioengineering, University of Medicine and Pharmacy „Grigore T. Popa", Iasi, Romania*

Background: Pelotherapy or mud therapy is a balneological method that triggers local tissue and general functional reactions, inhibiting or activating some intermediate enzymes and metabolite systems, but its mechanisms of action on certain pathologies are still not completely understood. Natural therapeutic factors such as mud and sulfurous mineral therapeutic waters are used in sanatoriums and rehabilitation clinics as baths or topical applications on the body for many affections, including in the Neuro-Myo-Arthro-Kinetic (NMAK) pathology. Cellular and molecular investigations performed by electrophoresis and ELISA assessment methods on primary fibroblasts cultures obtained from Wistar rats, target, in our work, two main physiological mechanisms, respectively the inflammatory processes and the oxidative stress (dys)balance, presumptive favorably influenced by mud extracts. Previous scientific data show that, during the inflammatory process, different cell types are recruited, including fibroblasts, which respond to various intercellular and tissue microenvironment signals. This leads to the regulated production of different pro- and anti-inflammatory mediators including cytokines, such as tumor necrosis factor (TNF)-α and interleukins (IL)-1β and IL-6, chemokines, and enzymes such as cyclooxygenase (COX)-2, all of which play critical roles in controlling the inflammatory process. The concept of oxidative stress caused by free radicals represents arguments of taking into account biomarkers of oxidative stress. In previous studies on therapeutic mud, was presented, by some of the authors, the fractionation of humic substances using the pH and solvent polarity variation and was spectrophotometrically characterized based on absorption in the wavelength range 340-700 nm humic acids and fulvic acids differentiated based on solubility and molecular mass.

Methods: To obtain the primary culture of glial cells, Wistar rat pups, aged 1-4 days, are availed from the Biobase of the National Institute for Research and Development in the Field of Pathology and Biomedical Sciences "Victor Babeș". Tissue explants is placed in DMEM medium on Petri dishes. Cells were grown in DMEM medium with 4500mg / l glucose, 25 mM HEPES, 100 U /ml penicillin, 50 μg / ml neomycin, and 100 μg / ml streptomycin. The medium is supplemented with 15% fetal calf serum. The cell culture dishes is incubated at 37°C, 5% CO_2, and 90% humidity. After 24 hours, the culture medium is changed to remove dead cells and cell debris. After the first medium's change, the medium is replaced with an equal volume of fresh, pre-warmed DMEM medium every 3 days. Phase contrast microscopy allows the study of living, unfixed and uncolored cells.

Results: Phase microscopy was used to observe the morphology of isolated fibroblasts cell cultures. These observations allowed interpretation of the morphological development as a consequence of time in culture. After 7 days in culture, the medium used is suplemented with mud extract. The morphology of control cell cultures versus those treated with mud extract is analyzed. IL6 and TNFα ELISA tests are perfomed for cell lysates and respectively prelevated cultures medium.

Conclusion: New data are obtained on the important molecular markers for inflammatory processes and oxidative stress balance, which may underpin a new research strategy applied to old natural remedies, bringing together mud therapy and cell cultures studies

ID570 Data Regarding Rotavirus-related Infections, a Retrospective Study

Violeta Corina Cristea[1], Loredana Gabriela Popa[1], Pecete Ionut[2], Andreea Alexandru[3], Octav Hogea [1], Mircea Ioan Popa[1]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Central Laboratory Synevo, Bucharest, Romania
[3]Central Laboratory "Regina Maria", Bucharest, Romania
[4]Cantacuzino National Military Medical Institute for Research and Development, Bucharest, Romania

Objectives: Gastroenteritis inflicted by the infection with Rotavirus is the most frequent cause of diarrhea in infants. In order to establish control and prevention methods, it is important to have a grasp of the situation, nationwide. We wanted to highlight the rate of positive tests for rotaviral infection from our data. Our reason being to offer additional information and combine it with the results reported by other labs in order to have a clear view regarding rotaviral infections.

Methods: In the study, we used 14,883 samples collected during 5 years (2017-2021). The samples were collected in sterile containers. The samples were taken to the lab on the same day or within 24 hours of sampling (with overnight storage under refrigeration conditions). The testing has been carried out using the qualitative immunoenzymatic method (RIDA QUICK, R-Biopharm).

Results: Of all the analyzed samples, 828 tests have returned positive (6% of cases). When dividing these patients using gender, we assessed a slight predominance in the male population in 426 cases (51%), compared to the female population in 402 cases (49%). The incidence of positivity by age group in descending order shows the predominance of the 2-3-year-old age group (41%), followed by the 4-7-year-old age group (with a percentage of 25%) and respectively 24% in children under 1 year, and 5% for both the 8-12 and 13-18 age groups.

Conclusions: Considering the frequency of severe infections, reported in literature and national sources, it is necessary to develop measures to prevent and control rotavirus infections. Statistically significant studies correlating clinical, epidemiological, and laboratory findings are required. Strict hygiene measures and vaccination must be included among the preventive measures. Laboratory tests should be performed to accurately establish the etiology of gastroenteritis and acute diarrheal disease in infants, children, and adolescents.

ID573 Clostridium Difficile - an Important Pathogen Isolated in Digestive Disorders

Violeta Corina Cristea[1], Loredana Gabriela Popa[1], Pecete Ionut[2], Andreea Alexandru[3], Mircea Ioan Popa[1,4]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Central Laboratory Synevo, Bucharest, Romania
[3]Central Laboratory „Regina Maria", Bucharest, Romania
[4]Cantacuzino National Military Medical Institute for Research and Development, Bucharest, Romania

Introduction: Throughout the last decades, the frequency and severity of digestive infections with Clostridium difficile have represented a serious public health problem. The main predisposing factors include antibiotic treatments, old age and also associated comorbidities. The study aims to highlight the incidence of Clostridium difficile infections, as well as the degree of involvement of the two toxins.

Methods: The samples were collected in sterile containers provided with a small shovel for collection. The transport took place the same day or in 24h maximum since the sampling process, with overnight storage in refrigeration conditions. The testing was performed through the qualitative method, using the CoproStrip test (SAVION Diagnostics), which detects both, individually and simultaneously the production of GDH, Toxin A and Toxin B.

Results: A total of 1.724 samples from hospitalized patients of different ages (18-96) were examined, following the clinical suspicion of Clostridium infection.

The prevalence of positive tests was 465 cases, representing 26.98%, with the following distribution: GDH, Toxin A (A) and Toxin B (B)positive in 283 cases (60, 86%); GDH, A positive and B negative in 44 cases (9, 46%); GDH, B positive and A negative in 9 cases (1, 93%) and GDH positive A negative and B negative in 129 cases (27, 75%). The incidence by age groups shows a higher positivity in adults over 50 years old with a number of 315 cases (67.75 %), compared to positive cases in adults under 50 years old, with a number of 150 cases (32.25%).

Conclusions: The laboratory plays an essential role in establishing the etiological diagnosis of Clostridium infection. Rapid tests provide the advantage of releasing the result in a short period of time, which enables the physician to initiate appropriate treatment, thus increasing the survival rate in these patients.

ID595 Successful Production of a BSK II Media and the Cultivation of Borrelia Burgdorferi Sensu Lato Strains

Viorela-Ioana Nicolae[1], Costin-Stefan Caracoti[1], Edgar-Costin Chelaru[1], Bogdan-Florin Ciomaga[1], Marius-Ciprian Ungureanu[1], Andrei-Alexandru Muntean[1,2], Mircea-Ioan Popa[1,2], Cristin Coman[2]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Cantacuzino National Military Medical Institute for Research and Development, Bucharest, Romania

Introduction: Lyme disease is a tick-transmitted bacterial infection caused by multiple Borrelia burgdorferi strains. Although cultures generally are not used for diagnosing this disease, they are useful in studies regarding pathology immunology of Lyme borreliosis.

Aim: The aim of this study was to prepare BSK II media using all the specified components of the recipe and grow multiple well known and characterized pathogenic strains of Borrelia spp.

Method: The necessary information was acquired from a partner laboratory from another country. The BSK II media recommended by our partner was prepared under their direct supervision. After the strains were inoculated, the purity and quality of growth was checked macroscopically and microscopically (dark field microscopy) every 2-3 days until stationary phase.

Results: All the pathogenic Borrelia spp. strains used in the study (including B. burgdorferi sensu stricto, B. garinii, B. valaisiana) have successfully grown in the prepared media, and were stored in the ultrafreezer.

Conclusions: The successful cultivation of Borrelia species responsible for Lyme disease is of great importance to our country due to the prevalence of the disease in our geographical region. These lab grown bacteria could be further used for in-house detection protocols such as ELISA, developing a borreliosis murine model, as well as serving as reference strains for National Centers.

ID617 Enhanced Dark Field and Fluorescence Microscopy as Tools for Quantification of Intracellular Distribution of Silica Nanoparticles

Luminita-Claudia Miclea[1], Mona Mihailescu[2], Nicolae Tarba[3], Ana-Maria Brezoiu[4], Ana Maria Sandu[5], Raul-Augustin Mitran[6], Daniela Berger[4], Cristian Matei[4], Mihaela Georgeta Moisescu[1], Tudor Savopol[1]

[1]Biophysics and Cellular Biotechnology Department, Excellence Center for Research in Biophysics and Cellular Biotechnology, Faculty of Medicine, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Digital Holography Imaging and Processing Laboratory, Fundamental Sciences Applied in Engineering Research Center, Faculty of Applied Sciences, University "Politehnica" of Bucharest, Romania
[3]Physics Department, Faculty of Applied Sciences, Doctoral School of Automatic Control and Computers, University "Politehnica" of Bucharest, Romania
[4]Department of Inorganic Chemistry, Physical-Chemistry & Electrochemistry, Faculty of Applied Chemistry and Materials Science, University "Politehnica" of Bucharest, Romania
[5]CAMPUS Research Center, Doctoral School of Electrical Engineering, University "Politehnica" of Bucharest, Romania
[6]"Ilie Murgulescu" Institute of Physical-Chemistry, Romanian Academy, Bucharest, Romania

Objectives: Colon cancer treatments based on nanometric particles loaded with known chemotherapeutic agents (e.g., Irinotecan (Iri)) are under intense research. Intracellular localization of mesoporous silica nanoparticles (MSNs) represents a challenge when they are non-fluorescent. This in vitro study focuses on determining the intracellular localization of unlabeled MSNs conjugated with folate and loaded with Iri, through 3D image reconstructions of different cellular compartments.

Methods: Human adenocarcinoma cells Caco-2 were grown for 24h on 12mm diameter round coverslips. Then MSNs in suspensions were added to the cells and further incubated for 24h.

A Cytoviva^{R} system based on enhanced dark field microscopy (eDFM) and hyperspectral imaging (HSI) was combined with fluorescence microscopy. For HSI, unlabeled cells were fixed and mounted on slides, while for fluorescence the cells were labeled: cytoskeletal actin with AlexaFluor488 Phalloidin, nucleus with DAPI.

Serial Z-stacks images in eDFM and fluorescence were acquired and analyzed using Cytoviva^{R} software and MATLAB lab-designed scripts. Three cellular compartments were defined on 3D reconstructions: nucleus, shell around the nucleus and cytoplasm. MSNs distribution was quantified in each compartment.

Spectral profiles of MSNs at pixel level were obtained and analyzed comparatively between intracellular MSNs and MSNs in suspension.

Results: Folate conjugated MSNs had an increased intracellular penetration, significantly higher than for MSNs without folate, the former preferentially being located in the shell around the nucleus. HSI confirmed that MSNs located in this shell were containing folate.

Conclusions: Our study combined HSI and eDFM techniques to quantify the intracellular distribution of non-fluorescent MSNs based on an original image processing algorithm for 3D reconstructions of cellular compartments using serial Z-stacks. These results open the way to characterize drug delivery systems inside the cells.

Acknowledgments: This work was supported by projects PN-III-P2-2.1-PED2019 (contract no. 525PED/2020) and Project No. P_36_611, MySMIS code 107066.

ID618 Cytotoxicity Evaluation of Folate Functionalized Silica Nanoparticles as Drug Delivery Systems for Irinotecan

Luminita-Claudia Miclea[1], Mona Mihailescu[2], Nicolae Tarba[3], Ana-Maria Brezoiu[4], Ana Maria Sandu[5], Raul-Augustin Mitran[6], Daniela Berger[4], Cristian Matei[4], Mihaela Georgeta Moisescu[1], Tudor Savopol[1]

[1]Biophysics and Cellular Biotechnology Department, Excellence Center for Research in Biophysics and Cellular Biotechnology, Faculty of Medicine, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

[2]Digital Holography Imaging and Processing Laboratory, Fundamental Sciences Applied in Engineering Research Center, Faculty of Applied Sciences, University "Politehnica" of Bucharest, Romania

[3]Physics Department, Faculty of Applied Sciences, Doctoral School of Automatic Control and Computers, University "Politehnica" of Bucharest, Romania

[4]Department of Inorganic Chemistry, Physical-Chemistry & Electrochemistry, Faculty of Applied Chemistry and Materials Science, University "Politehnica" of Bucharest, Romania

[5]CAMPUS Research Center, Doctoral School of Electrical Engineering, University "Politehnica" of Bucharest, Romania

[6]"Ilie Murgulescu" Institute of Physical-Chemistry, Romanian Academy, Bucharest, Romania

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Methods: Human adenocarcinoma cells Caco-2 were grown for 24h on 12mm diameter round coverslips. Then MSNs in suspensions were added to the cells and further incubated for 24h.

A Cytoviva^{R} system based on enhanced dark field microscopy (eDFM) and hyperspectral imaging (HSI) was combined with fluorescence microscopy. For HSI, unlabeled cells were fixed and mounted on slides, while for fluorescence the cells were labeled: cytoskeletal actin with AlexaFluor488 Phalloidin, nucleus with DAPI.

Serial Z-stacks images in eDFM and fluorescence were acquired and analyzed using Cytoviva^{R} software and MATLAB lab-designed scripts. Three cellular compartments were defined on 3D reconstructions: nucleus, shell around the nucleus and cytoplasm. MSNs distribution was quantified in each compartment.

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ID395 Microvascular Changes in the Macular and Parafoveal Areas of Multiple Sclerosis Patients Without Optic Neuritis

Mihai Bostan[1], Jacqueline Chua[2], Yin Ci Sim[2], Bingyao Tan[2,3], Inna Bujor[1], Damon Wong[2], Gerhard Garhofer[4], Cristina Tiu[1], Leopold Schmetterer[2,4,5], Alina Popa-Cherecheanu[1]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Singapore Eye Research Institute
[3]Nanyang Technological University, Singapore
[4]Medical University of Vienna, Austria
[5]Institute of Molecular and Clinical Ophthalmology, Basel, Switzerland

Objective: To find out whether retinal imaging could be used as a biomarker for multiple sclerosis (MS), we investigated retinal microvasculature alterations in participants with relapsing-remitting MS (RRMS) without history of optic neuritis (ON) using optical coherence tomography angiography (OCTA) and then compared them to a healthy control group.

Methods: This cross-sectional case-control study enrolled 58 participants (n = 100 eyes) with RRMS without ON and 78 age- and sex-matched control participants (n = 136 eyes). OCTA images of the superficial capillary plexus (SCP), deep capillary plexus (DCP) and choriocapillaris (CC) were obtained using a commercial OCTA system (Zeiss Cirrus HD-5000 Spectral-Domain OCT with AngioPlex OCTA, Carl Zeiss Meditec, Dublin, CA). The outcome variables were perfusion density (PD) and foveal avascular zone (FAZ) features (area and circularity) in both the SCP and DCP, and flow deficit in the CC.

Results: After adjusting for confounders, MS participants showed significantly increased PD in SCP ($P = 0.003$) and decreased PD in DCP ($P < 0.001$) as compared to controls. A significant difference was still noted when large vessels (LV) in the SCP were removed from the PD calculation ($P = 0.004$). Deep FAZ was significantly larger ($P = 0.005$) and less circular ($P < 0.001$) in the eyes of MS participants compared to the control ones. Neither LV, PD or FAZ features in the SCP, nor flow deficits in the CC showed any statistically significant differences between the MS participants and controls ($P > 0.186$).

Conclusion: Our study indicates that there are microvascular changes in the macular parafoveal retina of RRMS patients without ON, showing increased PD in SCP and decreased PD in DCP. Further studies with a larger cohort of MS patients and MRI correlations are necessary to validate retinal microvascular changes as imaging biomarkers for diagnosis and screening of MS.

ID399 HPV Infection and HPV Vaccination - Knowledge and Facts Among Young Girls in Romania

Iulia Ilie[1], Mihaela Corina Radu[1,2], Irina Nita[3], Loredana Sabina Cornelia Manolescu[1,4]

[1]Department of Microbiology, Parasitology and Virology, Faculty of Midwifery and Nursing, "Carol Davila" University of Medicine and Pharmacy, Romania
[2]Department of Birth, Obstetrics and Gynecology Hospital, Ploiesti, Romania
[3]Medical Oncology Department, Elias University Emergency Hospital, Bucharest, Romania
[4]Department of Virology, Institute of Virology "Stefan S. Nicolau", Bucharest, Romania

Objectives: Human papilloma virus (HPV) remains the main etiological factor of cervical cancer and represents an important cause of mortality among women aged between 14 and 44 years old. HPV vaccination represents all over the world the primary method of prophylaxis.

Through this study, we assessed the knowledge of young girls aged between 14 and 18 years regarding the infection with HPV, the consequences of the infection and the possibility of prophylaxis through vaccination.

Methods: An analytical cross-sectional observational survey was conducted in high schools from Romania. Data were collected with the use of a self-administered questionnaire. There were 110 responders, young girls aged 14-18, from high schools all over the country. The questionnaire consisted of 27 simple, multiple or short-answer questions and had 3 sections: 5 questions general data, 10 questions about the knowledge of HPV infection and 13 questions about HPV vaccination.

Results: The median age of the participants was 17 years old, the majority, 72,7%, come from urban areas. 86,4% of the responders knew that HPV is a virus. 60% of young interviewed girls knew that HPV infection consists of warts, however, 29,1% believed that the manifestations of HPV infection were fever, itches, diarrhea and mood changes. They associated HPV with cervical cancer in 75,5% responses. The most important source of information about the HPV vaccine in our responder's group was the internet that can sometimes be incorrect, 40%, and medical personal, only 10,9%. Unfortunately, when it comes to prevention, most of the responders believed that using condoms was the most effective method of prevention (85,5%) and 12,7% would use antibiotic treatment to prevent HPV infection. The majority of respondents are not vaccinated (87,28%), although 56,4% of them have heard about the existence of the HPV vaccination campaign carried out by The Ministry of Health and 77,3% considered vaccination to be an effective method of prevention in general. Among the reasons for not being vaccinated there were: they did not get vaccinated because they did not find the vaccine in

the family doctor's office (20%), the costs for buying HPV vaccine were too high (18,2%), or fear of adverse reactions (32%). Only 14 girls out of 110 were vaccinated against HPV, the age of onset of vaccination was 13 years, and most of them had the first dose at fourteen. 76,4% of the interviewed girls agreed to get vaccinated if they receive better information about the importance of HPV infection.

Conclusions: Although vaccination is done prophylactically to prevent HPV infection, in Romania, due to insufficient knowledge and lack of HPV free vaccine, HPV vaccination remains an important public health issue. Health programs should include information about HPV infection and should promote HPV vaccination. Available free HPV vaccines are needed in family doctor's offices all over Romania and family doctors should play a more active role in HPV vaccination.

ID405 Hepatitis B Prophilaxis in Pregnant Women

Mihaela Corina Radu[1,2], Mihaela Marin[1], Loredana Sabina Cornelia Manolescu[1]

[1]*"Carol Davila" University of Medicine and Pharmacy Bucharest, Romania*
[2]*County Emergency Hospital Ploiesti, Romania*

Introduction: One of the most common viruses involved in maternal-fetal transmission is hepatitis B virus (HBV). HBV infection remains a communicable disease whose burden affects the health of the world's population, including the Romanian population. Unfortunately, in Europe, HBV transmission from mother to child is the most common. According to the 2018 ECDC Annual Epidemiological Report, in Europe, vertical transmission was the most frequently reported (26%), followed by nosocomial transmission (19%) and homosexual transmission (14%).

Objectives: The aim of the study was to evaluate the risk factors associated with HBV infection in a hospital in Romania, especially in pregnant women diagnosed at birth, along with defining the knowledge of this category of pregnant women about HBV infection.

Material and methods: The study "Hepatitis B prophylaxis in pregnant women" is a descriptive study conducted on a group of 249 pregnant women who gave birth at the Ploiesti County Emergency Hospital during a period of three month. The respondents who completed the 20-question questionnaire were between 19 and 56 years old and they answered the questionnaire within 20 minutes, with the questionnaire in front of them.

Results: The median age of the responders was 21 years, the pregnant women aged between 19 and 46 years. Most of the respondents graduated high school and very few respondents, 34 out of 249, (13.65%) graduated college, 4 respondents had no education at all. 90% of respondents were at their first pregnancy. In the study group, the majority of respondents, 71.48%, had their first sexual contact after the age of 16 years, 11.24% declared that they had more than 3 sexual partners, and 15.26% that they never used a condom. In the studied group there was a percentage of 20.48% of respondents who have never heard of the HBV vaccine.

Conclusion: The study shows that expectant mothers do not pay enough attention to HBV infection, and, as a result, they do not know the manifestations, routes of transmission and means of preventing it.

The management of pregnant women infected with HBV and their newborns involves a joint effort of all health care providers such as- gynecologist, midwife, neonatologist, pediatrician, infectious disease specialist.

ID407 Knowledge, Attitudes and Practices of Pregnant Women Regarding Syphilis Prophylaxis

Mihaela Corina Radu[1,2], Aniela Olivia Petreanu[1], Loredana Sabina Cornelia Manolescu[1]

[1]"Carol Davila" University of Medicine and Pharmacy Bucharest, Romania
[2]County Emergency Hospital Ploiesti, Romania

Introduction: Syphilitic infection is of great severity, both socially, through the great contagiousness of its primary and secondary manifestations, and individually, through the distant consequences of the disease. Due to the possibility of being transmitted to the offspring's, syphilis can have a negative influence on the social and health status of future generations.

Objectives: The purpose of this study is was to establish the incidence of syphilis in a group of pregnant women at the Ploiesti County Emergency Hospital and to identify the profile of the pregnant woman at risk of transmitting syphilitic infection to the newborn. We identified: cases of syphilis in pregnant women interviewed, the socio-demographic profile of these pregnant women, general knowledge about Treponema pallidum infection, attitudes and practices regarding this infection and established recommendations for midwives regarding the prevention of syphilis.

Research methodology: The study is a descriptive study conducted on a group of 60 pregnant women who gave birth at the Ploiesti County Emergency Hospital during a month and was based on a 30 question questionnaire. The women who completed the questionnaire were between 20 and 47 years old. They answered the questionnaire within 35 minutes, having the questionnaire printed on paper.

Results: The average age of the respondents was 31.66 years (standard deviation 1.45), with a median of 27 years, 27 were married (45%), 33 were unmarried (55%) and 72% had no income.

Regarding the obstetrical profile, 28% were at their first pregnancy, 8 of them being 34 weeks pregnant.

Only 34 out of 60 respondents had knowledge about syphilis, 13% were not tested at all for syphilis during pregnancy, 14% said that syphilis is a disease that can be cured without treatment, 13% knew that it may be transmitted from mother to fetus during pregnancy, 8% believed that there is a vaccine against syphilis and 3% of respondents didn't know what methods should be used to prevent syphilis. 28% of respondents believed that screening for syphilis should be done to all women who want to conceive and only 17 respondents out of 60 said they have been treated with penicillin injections.

Conclusions: Serological examination (VDRL / RPR) before conceiving is the most important factor in preventing congenital syphilis. If this is not possible, serological screening should be done at the latest in the first trimester, knowing that the fetal infection may start at any point during the pregnancy. Penicillin treatment should be started immediately, depending on the stage. Serological follow-up should also be done after treatment. Pregnant women identified with syphilis should be advised about the disease, its impact on pregnancy and the importance of appropriate treatment. Identification of sexual contact with treatment and serological follow-up is essential to avoid not only the spread of this infection into the society, but also to avoid a possible reinfection of the pregnant woman

ID409 The Impact of Antithrombotic Therapy in Patients with Decompensated Heart Failure and Iron Deficient Anaemia During COVID 19 Pandemic

Alexandru Cristian Ion[1,2], Catalina Liliana Andrei[1,2]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Emergency Clinical Hospital Prof. Dr. Bagdasar Arseni, Bucharest, Romania

Objective: The iron deficient anaemia is a common medical condition in patients with heart failure receiving antithrombotic therapy. Especially during the COVID19 pandemic period the rate of bleeding complications associated with the antithrombotic therapy tend to be higher, as the patient's referral to medical services is lower and the interaction doctor-patient is limited.

Method: In our retrospective observational study we included 300 consecutive patients with decompensated heat failure associating iron deficient anaemia. For defining the medical conditions we used the ESC guidelines terminology and diagnostic criteria. We assessed the association between the iron deficient anaemia and different antithrombotic therapies, recommended in concordance to ESC Guidelines.

Results: We found that aspirin 75mg/day was statistical significant associated with iron deficient anaemia (p 0.012) and anaemia severity (p 0.002), this association being assessed by Chi square and Pearson tests. Also, neither clopidogrel, ticagrelor, VKA or non-VKA were associated to the presence of anaemia. By assessing the mortality rate associated to anaemia severity, the severe anaemia was associated to higher mortality rate, meanwhile no antithrombotic therapy was associated with higher readmission or mortality rate ($p<0.001$).

Conclusion: Aspirin was the only antithrombotic therapy associated with the presence of anaemia and anaemia severity, while only severe anaemia was associated with statistic significant increase of patient's mortality, with nonstatistical result regarding the readmission rate. This finding is concordant to the necessity of a permanent evaluation of the antithrombotic therapy in heart failure patients.

ID412 Infections Associated with the Medical Act - an Important Public Health Problem

Mihaela Corina Radu[1,2], Andreea Visanica[1], Letitia Goraneanu Draghici[2], Calin Boeru Adrian[2], Loredana Sabina Cornelia Manolescu[1]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*County Emergency Hospital Ploiesti, Romania*

Introduction: Patients with leukemia are susceptible to bacterial and viral infections. These infections are often severe and recurrent, which is due to their compromised immune system. Due to the widespread administration of antibiotics resistant bacteria had developed and many antibiotics that in the past were the standard treatment for bacterial infections are less effective or completely useless. Multidrug-resistant bacteria grow mainly in hospitals, and infections associated with the medical act are very difficult to treat, especially in children with leukemia.

Objectives: The aim of this paper is to emphasize the importance of the correct use of antibiotics to avoid the development of multidrug-resistant bacterial strains that are difficult to treat, especially in immunocompromised patients.

Material and methods: Ten cases of leukemia diagnosed and treated in the Pediatrics department of the Fundeni Clinical Institute were studied. In these patients, during repeated hospitalizations, various complications appeared due to opportunistic infections.

Results: The most common pathogens encountered in the pediatric Fundeni ward were: Escherichia coli (5 patients out of 10), Klebsiella spp (4 patients out of 10), Staphylococcus epidermidis (3 out of 10), Staphylococcus aureus (sensitive methicillin 2 patients, resistant methicillin 2 patients) , Clostridium Dificille (3 cases out of 10). Rare cases of infections were with: Acinetobacter-2 cases, Enterococcus spp-1 case, Pseusomonas Aeruginosa-1 case, Proteus spp-1 case, Klebsiella Pneumoniae-1 case. The viral infections encountered were: VZ-1 patient, CMV-2 patient, BKV-1 patient, Adenovirus-2 patients, Rotavirus-2 patients.

Conclusion: Infections associated with the medical act are an important public health problem and are related to deficiencies in sterilization, hygiene, maneuvers or medical care. Most often these infections manifest themselves clinically during hospitalization or shortly after discharge. Control programs should cover prevention and surveillance actions, as well as staff training.

ID413 Dry Eye Disease - Impact on Medical Students

Laura Denisa Preoteasa[1,2]

[1]*"Carol Davila" University of Medicine and Pharmacy Bucharest, Romania*
[2]*Clinical Emergency Eye Hospital Bucharest, Romania*

Objectives: To assess the extent in which medical students are affected by dry eye disease (DED). We also want to establish the prevalence of severe DED according to study year and identify potential risk factors.

Methods: Using OSDI score (Ocular Surface Disease Index) in an online survey (Google Form), we managed to obtain 274 answers from 1st to 6th year medical students from "Carol Davila" University of Medicine after the summer exam session. OSDI has demonstrated 83% specificity and 60% sensitivity in the diagnosis of DED, and it can quickly assess the frequency of ocular symptoms and their effect on vision-related function.

Results: The study group was composed of 81.4% females and 18.6% males. Distribution among study years was similar: 1st year (10.6%), 2nd year (16.8%), 3rd year (21.9%), 4th year (15.7%), 5th year (13.9%), 6th year (21.2%). Among all students, the majority (43.1%) spend between 5-8 h/ day in front of blue screens and only 4.7% spend under 3h/day. 45.26% of students do not associate any risk factor for DED, while the others can be classified into multiple risk profiles. DED was most frequently associated with smoking (25.18%), followed by atopy (14.6%), contact lens wearers (13.14%), oral contraceptives (8.39%), autoimmune diseases (4.74%) and vitamin A deficiency (1.82%) – Pearson coefficient = 0.96. Other factors such as keratoconus, history of refractive surgery and congenital cataract were encountered <1% each. OSDI concluded that severe DED was the most diagnosed form ranging from 37% in 2nd year to 52% in 1st year.

Conclusion: Sever DED is seriously prevalent among medical students, regardless of their study year. Screen time, although not the only factor, likely plays a role in exacerbating the disease. The following study wants to raise awareness on this topic and may be an open-door for new research targeting young individuals especially.

ID417 Diagnosis Dilemma Neoplasia or Bacterial Infection?

Raluca-Elena Stan[1], Cristina Japie[1], Otilia Rosu[1], Ilena Postelnicu[1], Laurentiu Marinescu[1], Valentin Enache[1], Camelia Diaconu[1,2]

[1] *Clinical Emergency Hospital of Bucharest, Romania*
[2] *"Carol Davila" University of Medicine and Pharmacy Bucharest, Romania*

Introduction: Actinomycosis is a rare chronic disease caused by Actinomyces spp., anaerobic Gram-positive bacteria that normally colonize the human digestive and genital tracts. Pulmonary actinomycosis occurs frequently in male smoker patients with poor dental hygiene and may mimic the malignancy process in various anatomical sites.

Case presentation: A 49-year-old patient, smoker, with a recent fracture of the left IXth rib after thoracic trauma was admited to hospital after suffering from pleuritic chest pain, dyspnoea, involuntary weight loss (15 kilograms), fatigue, symptoms that started a few months ago. The patient' s history indicated no fever and chills. At the clinical examination the pacient presented a precarious biological status, cachectic, pale skin and auscultation of the chest indicated vesicular breath abolished in the left hemithorax. Laboratory studies revealed a significant inflammatory syndrome and moderate hyochromic mycrocytic anemia. Esophagogastroduodenoscopy indicated a small gastric transhiatal hernia and erythematous gastropathy. The chest X-ray revealed a pseudonodular opacity, with irregular contour located in the left lower lobe, and the chest computed thomography (CT) scan identified a left mass that infiltrated the lung parenchyma and extrapleural space to the limit of the costal lattice, with mediastinal and hilar lymphadenopathy. The assesment was completed with a head and abdominopelvic CT that did not detect other pathological changes or metastases. A biopsy was necessary, but the location of the mass did not allow fibrobronchoscopy, so an open surgical resection was performed. The intraoperative extemporaneous examination was inconclusive, and the histopathological analysis revealed the presence of Actinomyces, a rare infection, without neoplastic cells.

Conclusions: Pulmonary actinomycosis is often confused with other lung diseases, such as cancer or tuberculosis. The differential diagnosis is very important, and the appropriate treatment (long term antibiotic therapy) , instituted early, can lead to a favorable evolution of this disease.

ID423 Psoriasis Exacerbations Occurring after SARS-CoV2 Vaccination

Andreea-Roxana Furtunescu[1,2], Oana-Laura Crivat[2], Răzvan Cornia[2], Vasile Benea[1,2], Mircea Tampa[1,2], Simona-Roxana Georgescu[1,2]

[1] *"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2] *„Victor Babes" Clinical Hospital for Infectious Diseases, Bucharest, Romania*

Objectives: During the SARS-CoV2 vaccination campaign a great number of people diagnosed with chronic inflammatory diseases were immunized at the same time. This allowed for the observation and study of some potential side effects of vaccination in this patient group that had been very little described so far. The purpose of our study was to analyze psoriasis flares occurring after the administration of the SARS-CoV2 vaccine.

Methods: We conducted a literature review of articles published up to April 2022 in order to identify flares in patients that had already been diagnosed with psoriasis, occurring after vaccination against SARS-CoV2. We included 25 case reports and case series in our study, and we analyzed data about 70 patients from those studies.

Results: No association was found between the type of vaccine administered and the occurrence of exacerbations. Most flares were reported after the second dose of vaccine. Out of 10 patients that experienced a flare after the first vaccination dose, 7 reported flares after the second dose as well. Most psoriasis flares occurred in the first two weeks after vaccination.

Conclusions: Although it is likely that a certain relationship exists between vaccination and psoriasis exacerbations, immunization should not be discouraged in this patient group. Psoriasis flares after vaccination are rare and usually mild, and the benefits of vaccination largely outweigh the risks. Information obtained from the SARS-CoV2 vaccination campaign can be of value in future vaccination efforts in this patient group.

ID427 Calcinosis Cutis - Independent Risk Factor for All-cause Mortality in Systemic Sclerosis Patients

Cristina Nita[1], Laura Groseanu[1,2], Daniela Opris-Belinski[1,2], Denisa Predeșteanu[1,2], Violeta Bojincă[1,2], Florian Berghea[1,2], Ioana Saulescu[1,2], Sinziana Daia[1,2], Diana Mazilu[1,2], Andreea Borangiu[1,2], Maria-Magdalena Negru[1,2], Cosmin Constantinescu[1,2], Mihai Abobului[1,2], Claudia Cobilinschi[1,2], Violeta Vlad[1], Madalina-Pusa Duna[1], Ruxandra Ionescu[1,2], Andra Balanescu[1,2]

[1]Saint Mary Clinic Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objectives: The objectives of this study were to describe the prevalence and characteristics of calcifications, and to investigate the relationships between calcinosis and clinical features in a population of patients with SSc.

Methods: Demographic and clinical features, including duration of disease progression, symptoms and parameters related to a specific organ involvement according to MEDS evaluation sheets, were evaluated in all SSc patients since January 2000.

Results: 154 SSc patients were selected in the database, from which we identified a final group of 31 (20%) patients with calcinosis related to systemic sclerosis. The calcinosis cohort comprised 25 females and 6 males, with a mean age of 52.6 (±14.3) years, most of them with diffuse subset (16/31). Mean disease duration was 5.6 years (±3.1). Mean modified Rodnan skin score (mRSS) was 9.46 (±3.4) and mean adjusted EScSG activity index in the subgroup with calcinosis was 3.6 (±1.9). 45.16% (14/31) patients from the calcinosis subgroup developed interstitial lung disease (ILD) vs 43.9%; pulmonary hypertension was seen in 51.6% (16/31) cases vs 10.5% (13/123). As expected, calcifications were closely associated with vascular (p=0.004) and gastrointestinal (p=0.001) involvement and pulmonary hypertension (p=0.049). Associations were stronger for severe gastrointestinal involvement defined as chronic intestinal pseudo-obstruction (p=0.001). Females (p=0.024), patients with digital ulcers (p=0.004), those with disease duration longer than 10 years (p=0.001), those with pulmonary hypertension (p=0.049) and patients with gastrointestinal involvement (p=0.044) presented significantly more calcinosis. There were no significant associations between calcinosis and disease activity, myositis, interstitial lung disease, type of scleroderma or autoantibodies. Furthermore, in the logistic regression equation we identified calcinosis as a risk factor for all-cause mortality in SSc patients [OR:2.607 (CI:1.062,6,397), p=0.037].

Conclusion: Calcinosis cutis seems to occur more often in patients with long-standing disease and is more commonly associated with vascular involvement such as digital ulcers and pulmonary hypertension.

ID428 Efficiency of Sertaconazole Compared to Other Treatments for Seborrheic Dermatitis

Mircea Tampa[1,2], Andreea Amuzescu[1,2], Clara Matei[1], Cristina Iulia Mitran[1], Madalina Irina Mitran[1], Simona Roxana Georgescu[1,2]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]"Victor Babes" Clinical Hospital for Infectious and Tropical Diseases, Bucharest, Romania

Objective: Seborrheic dermatitis (SD) is a common chronic inflammatory skin disorder affecting sebaceous follicles and active sebaceous glands. Although its aetiology is not completely understood and it is deemed to result from a combination of genetic and environmental factors, the disease has been related to a weak helper T cell response to certain Malassezia yeast species. Therefore, antifungal agents such as ketoconazole or ciclopirox, zinc pyrithione or selenium sulfide alone or in combination with anti-inflammatory agents such as topical corticoids represent effective treatments. Sertaconazole nitrate is a relatively new antifungal agent different in structure from other imidazole antifungals, featuring a benzothiophene ring similar to the indole ring of tryptophan, able to insert and form pores in fungal cell membranes in approximately 10 min. since topical application. The aim of our study was to assess the efficiency of sertaconazole compared to other treatments in patients with SD.

Material and method: We performed an extensive literature search by interrogating the PubMed database with the keyword combination "sertaconazole AND seborrheic dermatitis AND clinical trial" which retrieved 8 controlled clinical trials evaluating the effects of sertaconazole in SD.

Results: All of the clinical trials included a standard scoring index (SI). At 28 days since beginning of the treatment, sertaconazole produced a significantly higher percentage of patients with a mild SI (odds ratio 1.95), a lower percentage of patients with moderate or severe SI (odds ratio 0.51), and a higher percentage of patients evaluating the level of satisfaction at the end of the treatment as good (odds ratio 3.0) compared to the other treatments (hydrocortisone, clotrimazole, metronidazole, pimecrolimus).

Conclusion: Sertaconazole represents a good therapeutic option for patients with SD.

ID433 The Impact of Lifestyle on the Onset of Menopause in a Group of Women in Bucharest

Elena Iuliana Pascu-Gabara[1], Ionuț-Claudiu Gabara[2] , Laura Maria Vasilca-Gavrila[3]

[1]Sanamed Hospital, Bucharest, Romania
[2]Colentina Clinical Hospital, Bucharest, Romania
[3]Faculty of Dental Medicine, University of Medicine and Pharmacy „Grigore T. Popa", Iasi, Romania

Objectives: Early onset of menopause is a known risk factor for health problems secondary to long-term estrogen deficiency, such as osteoporosis or cardiovascular disease.

Methods: Retrospective study of 2-years-period (2020-2022) with the analysis of a sample from a population of women aged 41-86years. The cohort was randomly prepared from 115 menopausal women, consulted in the Endocrinology Department of Sanamed Hospital,Bucharest. The following were registered: age, place of origin, occupation, physical activity, smoker status, former smoker or non-smoker, degree of coffee/alcohol consumption, menarche age, age of menopause, number of births, weight and height to calculate the index body mass index (BMI).

Results: The mean age of the women included in the study was 59.92±8.7 years. The study group was dominated by patients from the urban environment (87.82%). Regarding the activity carried out, domestic/retired patients predominated (77.39%). From the studied group dominated the patients who have a predominantly sedentary physical activity in a percentage of 79.13%. Most patients are not alcohol consuming(59.13%). The percentage of women with ≥2 births was clearly higher (44.34%). The age at first pregnancy <25 years was the majority (69.56%). The mean age of onset of menopause was 46.67±4.8 years, dividing patients into 3 categories: early menopause-27 patients (23.47%), physiological-77 patients (66.95%) and late-11 patients (9.56 %). The mean age of the menarche is 13.36±1.9 years. The average body mass index was between 28.5±7.1 kg/m^2.

Conclusions: Most patients came from urban areas, mostly sedentary and are domestic or retired. Most patients are non-smokers and do not consume alcohol. Women who had 2 or more births predominated. Age at first birth<25 years delimited a majority group. The average age of menarche was within physiological limits. The average age of onset of menopause was also within physiological limits. Calculating BMI, overweight patients predominated.

ID434 Acute Leukemia and Associations with Unfavorable Prognosis

Georgeta Daniela Georgescu[1,2], Silvia Ciortan[1], Anca Raitaru[1], Claudia Despan[1], Ionel Gelatu[1]

[1]Colentina Clinical Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Introduction: Leucemia acuta este o boala clonala, maligna a tesutului hematopoietic caracterizata prin acumularea de celule blastice anormale, in principal, in maduva osoasa hematogena si impiedicare a hematopoiezei normale. Leucemia acuta este o patologie ce necesita diagnostic de urgenta si poate fi asociat cu un prognostic nefast. Acute leukemia is a clonal, malignant disease characterized by the accumulation of abnormal blast cells, mainly in the bone marrow, and inhibition of normal hematopoiesis. Acute leukemia is a pathology that requires emergency diagnosis and can be associated with a poor prognosis.

Objectives and Methods: There will be presented 6 cases of acute leukemia with associated pathology, with unfavorable prognosis.

Results: The 38-year-old female, with no known history, was diagnosed in December 2021 with acute promyelocytic leukemia - a high-risk form, for which chemotherapy was initiated. During the evolution, the patient installs massive supratentorial hemorrhagic stroke. Emergency decompression neurosurgery was performed, which revealed a ruptured arterio-venous malformation, which led to death.

Another 38-year-old female, with grade III obesity, diagnosed in March 2022 with acute myelomonocytic leukemia FLT TKD positive - hyperleukocytic form, for which standard chemotherapy and FLT3 inhibitor was initiated. During the evolution, the patient associated left cephalic vein thrombosis, complicated with PE in the segmental and subsegmental arteries, splenic infarction, bilateral central retinal vein thrombosis - hemorrhagic form and subsequent cerebellar hemorrhagic stroke, which led to death.

44-year-old patient, chronic ethanol user and smoker, diagnosed in June 2022 with acute lymphoblastic B cell leukemia, with severe pancytopenia at diagnosis, for whom specific chemotherapeutic treatment was initiated, and during post-chemotherapy aplasia presented positive blood cultures with E. Coli and Candida Tropicalis, with unfortunate evolution, despite the broad-spectrum antibiotic and antifungal treatment.

A 66-year-old female, with no significant history, diagnosed in February 2020 with acute myelomonocytic leukemia after CMMoL, for which therapy with hypomethylating agent was administered, and a BCL2 inhibitor was added. The patient had initial favorable response to treatment. In January 2022, the patient associated SARCOV2 infection with severe thrombocytopenia, with the appearance of severe GI bleeding, which led to death.

A 64-year-old female, initially diagnosed in 2011 with MDS-RAEB2, for whom she received treatment with a hypomethylating agent, with a partial hematological response, with persistent thrombocytopenia. In June 2022, the patient was hospitalized with extensive cutaneous mucosal hemorrhagic syndrome, and investigations revealed a transformation into acute leukemia- AML FAB 4 with hyperleukocytosis, high risk, with the presence of del (11) (q23) and positive FLT3 ITD mutation. During evolution, the patient installs cerebellar hemorrhagic stroke, which led to death.

A 54-year-old female, known with Spondylitis on immunosuppressive treatment, was diagnosed in December 2021 with acute myeloblastic leukemia-AML FAB2, post myelodysplastic syndrome, FLT3-negative, for which standard induction treatment was initiated, followed by period of severe aplasia, during which she presents Clostridium Difficile infection, SARS-COV2 infection, positive blood cultures with E. Coli for which she received broad-spectrum antibiotic treatment and antiviral treatment. Due to severe thrombocytopenia, the patient has severe GI bleeding. During the hospitalization the patient also presented an internal jugular vein thrombosis associated with the insertion of the central venous catheter. The patient's evolution was unfavourable.

Conclusion: Acute leukemia is a high-risk malignancy that can be associated with other conditions which influence the patient's outcome.

ID443 Efficacy of Extracorporeal Shock Wave Therapy and Assessment Strategy Through a Novel Gait Analysis System for Post-stroke Spasticity

Emanuela Elena Mihai[1], Mihai Berteanu[1,2]

[1]Department of Physical and Rehabilitation Medicine, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

[2]Department of Physical and Rehabilitation Medicine, Elias University Emergency Hospital, Bucharest, Romania

Objectives: Lower limb spasticity often affects stroke patients and has a major impact on their walking ability, requiring early detection, assessment and treatment of walking deficits. Lately, instrumented treadmills are used to assess spatiotemporal and kinematic parameters, complementing the clinical evaluation with objective data.

Methods: Through this prospective observational study we aimed to assess 10 stroke patients at the same walking speed before and after radial extracorporeal shock wave therapy (rESWT) delivery and conventional physical therapy program through an instrumented treadmill and gait analysis system. Therefore, spatiotemporal and kinematic parameters were recorded and correlated with the clinical evaluation. Kinematic outcomes were hip and ankle range of motion (ROM). Spatiotemporal parameters consisted of the step length, step cycle time, stance flexion-extension, stance pronation-supination, swing flexion-extension, and swing pronation-supination. Clinical outcomes were spasticity grade, range of motion, pain intensity, and sensorimotor function. The efficacy of the conventional rehabilitation program and rESWT on plantarflexor spastic muscles and gait pattern were evaluated through spatiotemporal, kinematic, and clinical parameters. The statistical analysis was performed through GraphPad Software, Microsoft Excel, and MATLAB.

Results: All outcomes showed statistically significant improvement, and spasticity grade and pain intensity decreased dramatically. The sensorimotor, lower limb function, balance, and gait parameters including spatiotemporal and kinematic variables were enhanced at the end of the rehabilitation program and rESWT delivery.

Conclusion: Objective data and adapted clinical evaluation showed that rESWT and the conventional physical therapy program improved clinical endpoints, spatiotemporal and kinematic parameters. The interventions decreased the spasticity grade, and pain intensity, and enhanced sensorimotor outcome and lower limb function, balance, and gait in stroke patients with lower limb spasticity.

ID457 Allergic Status In Helminthic And Giardiasis Infestation

Stefanita Bianca Vintilescu[1], Mihaela Andreea Podeanu[2], Stepan Mioara Desdemona[1]

[1]*University of Medicine and Pharmacy of Craiova, Romania*

[2]*Clinical Emergency County Hospital, Craiova, Romania*

Objectives: Allergic status involves elevated levels of immunoglobulins E, the same immunological mechanisms being found in helminthic infestation and giardiasis. The study of the realities of coexistence or causality represents a point of interest for the pediatrician in establishing the therapeutic conduct. The objectives of this study are to highlight the correlation between sex, origin, type of parasite and prevalence of allergy in preschoolers.

Methods: The retrospective study included 34 preschoolers who presented in the Ambulatory of Pediatrics between 2020-2022 of the Emergency County Clinical Hospital of Craiova and were subsequently diagnosed with intestinal parasitosis and also their allergic status was investigated.

Results: Epidemiological analysis indicated that out of 34 patients diagnosed with intestinal parasitosis, 35.3% (12 cases) were male and 64.7% (22 cases) were female. From the total home environment, 76.5% (26 cases) were rural areas and 23.5% (8 cases) from urban areas. Paraclinical analysis indicated the presence of total serum IgE level increased in 67.6% (23) of cases and 11.8% (4 cases) reported allergies without changes in Ig E level, thus 79.4% of cases had a positive allergic status. The pathogenic agents identified in this study were Giardia lamblia 23.5% (8 cases), Ascaris lumbricoides 61.8% (21 cases) and Enterobius vermicularis 14.7% (5 cases). The statistical analysis showed significant correlations between the positive allergic status and the parasite ($p=0.009$, $\chi 2$ test) and between the increased level of Ig E and the rural environment ($p=0.037$, $\chi 2$ test) and the parasite ($p=0.001$, $\chi 2$ test).

Conclusions: The obtained results in this study highlight particular clinical-epidemiological aspects of intestinal parasitosis in preschoolers. The identified statistical relationships can be used to improve the prophylactic and therapeutic management of parasitic infestations in the context of a field with high allergenic potential.

ID467 Clinical and Evolutive Characteristics in Pediatric Inflammatory Multisystemic Syndrome Associated With Covid 19

Gabriela Viorela Nitescu[1,2], Diana Andreea Usurelu[1], Teodora Adela Turcu[1], Ruxandra Stejeroiu[1], Stefania Ioana Ionescu[1], Andra Postelnicu[1], Ana-Maria Mihalcea[1], Simona Stanca[1,2], Iolanda Vivisenco[2], Madalina Petran[1], Marina-Dorina Craciun[2], Alexandru Ulici[2], Coriolan Emil Ulmeanu[2]

[1]*"Grigore Alexandrescu" Clinical Emergengy Hospital for Children, Bucharest, Romania*

[2]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Objectives: Our study aims to evaluate the clinical and evolutive characteristics of the patients with PIMS-TS admitted to our clinic during the COVID-19 pandemics, new clinical entity with potential severe outcome.

Methods: We realized a prospective cohort study on a period of 21 months (October 2020- June 2022) that enrolled children of 0-18 years diagnosed with PIMS-TS according to WHO criteria. We took into consideration the following data: age, sex, clinical and paraclinical modifications, treatment and evolution. For analysis of statistical data we used IBM SPSS software.

Results: Our study included 36 patients of 9.9 years median age, male to female ratio 1:1 and a median hospital length stay of 9 days (IQR 4;18). At admission patients presented with fever (100%), inflammatory syndrome (100%), cardiac (47,2%), gastrointestinal (52,7%), muco-cutaneous (63,8%), respiratory (38,8%) or neurological manifestations (11,1%). At admission 14/36 patients having positive IgM antibodies (median value 1,17; IQR 0,13-5,03) and 34/36 patients with positive IgG anti-nucleocapsid (median value 4,35; IQR 0,28-8,14). The statistical analysis of patients treated with corticosteroids, compared to the group treated with immunoglobulins + corticosteroids, shows that patients who received immunoglobulins spent significantly more days in hospital ($p<0.002$) and at discharge significantly less frequent signs of cortisone impregnation ($p<0.004$). At follow-ups 2 patients (6.4%) had long-time complications one patient had persistent coronary aneurysm and another one had pulmonary imagistic lesions ("ground-glass" opacities).

Conclusion:

1. Despite the fact that PIMS-TS is a severe entity, it has favorable evolution in most cases.
2. In our study children who received corticosteroids-immunoglobulins association spent more days in hospital, but significantly less frequent signs of cortisone impregnation.

ID473 Diet in Pediatric Functional Constipation

Mihaela-Andreea Podeanu[2],Stefanita Bianca Vintilescu[1], Desdemona Mioara Stepan[1]

[1]*University of Medicine and Pharmacy of Craiova, Romania*
[2]*Clinical Emergency County Hospital, Craiova, Romania*

Objectives: Functional constipation is one of the most common chronic childhood disorders, affecting between 1% and 30% of children worldwide. Numerous studies have shown that diet is the main risk factor in the occurrence of this pathology. The objective of the study was to analyze the frequency of diet mistakes that lead to the occurrence of this pathology in the target group.

Method: In this study we included 31 children aged between 4 and 12 years, who presented in the Pediatric Outpatient Clinic of Craiova County Emergency Clinical Hospital between January and June 2022 for constipation symptoms. All children completed a set of 4 questions in the form of a single-answer grid questionnaire.

Results: Females were predominant (71%, 22 cases) and most came from urban areas (74.2%, 23 cases). Out of the total number of those who filled in the form, 54.8% (17 cases) confirmed that going to the toilet causes them fear. When asked about the regularity with which the child eats vegetables, 77.4% admitted not only that they do not like vegetables, but also that they avoid them. One of the aspects statistically correlated with the presence of constipation is the consumption of fruits or natural juices less than a few times a week, 61.3%, 19 cases ($p = 0.024$, $p = 0.025$, $\chi 2$ test) being in this category. To the question "Consumption of sweets and / or fast food", 58.1%, respectively 18 children chose the "almost daily" option, which was statistically correlated with the diagnosis of functional constipation ($p = 0.014$, $\chi 2$ test) .

Conclusion: Dietary interventions are the most effective treatment for functional constipation. Thus, the identification of the main areas where it is possible to intervene are useful for improving the quality of life of children and their families.

ID477 The Efficacy of Triple Therapy Treatment with Probiotics in Eradicating Helicobacter Pylori Infection in Gastroduodenal Ulcers

Andreea-Manuela Franculescu-Bertea[1,2], Ionel Copaci[2], Elena Laura Iliescu[1,2]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Fundeni Clinical Institute, Bucharest, Romania*

Introduction and objective: The efficacy of standard triple therapy on HP infection has a 25% failure rate. New approaches to improve the efficacy of triple therapy are clinically important.

Method: HP infection was confirmed by histological examination of antrum and body with Giemsa stain or 13C-urea breath test. Exclusion criteria: gastric malignancy, pyloric obstruction, esophageal stricture, active bleeding/perforated ulcer, previous gastric/duodenal surgery, ingestion of antibiotics/bismuth/PPI the prior 4 weeks.

HP positive patients were randomly assigned in equal numbers to receive 10 days of triple therapy (clarithromicin 500 mg, amoxicillin 1000 mg, pantoprazole 20 mg, all bid) with/without simultaneous probiotics (Bifidobacterium longum) daily. Post-treatment assessment was made after 4-6 weeks.

Clinical response evaluation: questionnaire containing history of smoking/drinking alcohol, intensity of symptoms and adverse events (abdominal pain, diarrhea, constipation, dizziness, taste perversion, headache, anorexia, nausea, skin rash) were used. Gender distribution, the initial endoscopic diagnosis between subjects in the two groups were compared byχ^2. The analyzed efficacy outcome was cure of HP.

Results: CAP: 44 pacients, M/F 24/20, mean age (years) 43,45± 14, 17 pacients with gastric ulcer, 24 with duodenal ulcer, 28 smokers. Compliance 92,9% in CAP group, 99,5% in CAP+P. Adverse events: 34% in CAP , 13% in CAP+P CAP+P: 44 pacients, M/F 16/18, mean age 46,8±17, 20 with duodenal ulcer, 24 with gastric ulcer, 31 smokers.

CAP: eradication 32/44=72,7 %; clinical response (resolution of pretreatment symptoms)- cure 35/44=80%, improvement 9/44=20%; Healed ulcer(asssessed by histology) -39/44=88,6%. CAP+P: eradication of HP - 38/44=88,8%, clinical responce-cure 38/44 (88,8%), improvement 5/44 (11,4%), healed ulcer 41/44 (93,1%)

Conclusions: The simultaneous treatment with Bifidobacterium-containing probiotics can decrease HP loads and frequency of side effects, improving the efficacy of triple therapy in eradicating HP.

ID482 MOBILISE - a Novel and Green Mobile One Health Laboratory for (Re-)emerging Infectious Disease Outbreaks

George Suciu[1], Luminița Marcu[1], George-Valentin Iordache[1], Cosmina Stalidi[1], Sorina Mitroi[1], Ioana Suciu[1]

[1] R&D Department, Beia Consult International, Bucharest, Romania

Introduction: Due to climate change and rising temperatures, emerging arboviruses are reaching Europe via arthropod vectors (mosquitoes, ticks) and becoming a major public health concern.

Objectives: Optimal monitoring of zoonotic outbreaks requires a "One Health" approach, where not only human samples are analyzed, similar to vector habitats. Also, returning travelers could be carriers of the hemorrhagic virus (Ebola/Marburg) or respiratory pathogens such as SARS-CoV-2.

Methods: Laboratories play an essential role in combating outbreaks in remote areas. The study on the capacity of mobile laboratories in Europe revealed serious shortcomings.

MOBILISE proposes to close this diagnostic gap by developing new, qualitative "One Health" mobile laboratory solutions to provide BSL-4 capacity in many European countries. It will receive human/animal/environmental samples for molecular diagnostics, serology, microbiology and host a whole genome sequencing platform for pathogen discovery and epidemiological analysis.

The development of new rapid diagnostic tests for BSL-3/4 pathogens will produce results in machine-readable form. A new artificial intelligence-based software "Emergency Operating Centre and Decision Support System" will help end-users coordinate MOBILISE fleets across Europe and manage outbreaks in real time. Based on the electric/hybrid truck platform, using solar and wind power, it will reduce CO2 emissions in line with the European Green Deal. The lab will be field tested by TRL-7.

Conclusions: Mobilise provides a more efficient cross-sectorial, cross-disciplines, cross-border coordination of the disaster risk management cycle from international to local level, enhancing the sharing of knowledge and coordination regarding standardization in the area of crisis management and strengthening the capacities of first responders in all operational phases related to any kind of (natural and man-made) disasters so that they can better prepare their operations.

ID495 SARS-CoV-2 Reinfections Among Healthcare Workers in a Tertiary Infectious Disease Hospital from Bucharest, Romania

Carmen Cristina Vasile[1,2], Mihaela Nicoleta Bercea[1,2], Bianca Georgiana Enciu[1,3], Carmen Daniela Chivu[1,4], Maria Dorina Craciun[1,4], Daniela Pitigoi[1,2]

[1] „Prof. Dr. Matei Bals" National Institute for Infectious Diseases, Bucharest, Romania
[2] "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[3] National Institute of Public Health, Bucharest, Romania
[4] Emergency Clinical Hospital for Children "Grigore Alexandrescu", Bucharest, Romania

Objectives: We aim to describe the characteristics of SARS-CoV-2 reinfections among HCW in a tertiary infectious diseases hospital in Bucharest, Romania.

Methods: We performed a retrospective study between March 2020 and April 2022 using the hospital database. A reinfection case was defined as two positive PCR or antigen tests at least 90 days apart. The COVID-19 vaccination campaign has begun in 27 December 2020, healthcare workers (HCW) being prioritized.

Results: Out of the 1249 HCW, 53.5% had one SARS-CoV-2 infection, 10.2% had two distinct infections, while 0.2% had three. The reinfection rate was 16 % (versus 4% at national level). The median age of HCW with two distinct infections was 45.5 (IQR: 38-52). 108 were female and 20 were male (10.2% vs. 10.3% out of total HCW). Before reinfection, 55% had completed their primary vaccination series, 25% had received their booster dose, 19% remained unvaccinated and 1% had an incomplete vaccination course. The reinfection occurred at a mean interval of 289 days after the completion of the primary dose vs. 101 days after the booster. The highest reinfection rate was recorded among the emergency room staff (19%) and among nurses (12%). The mean time interval between the two episodes was 454 days. Most reinfections were registered between January and April 2022, when the predominant circulating variant in Romania was Omicron (91%).

Conclusion: HCW registered a reinfection rate four times higher than the national level, with the highest risk among emergency staff and nurses. It is essential to further promote the importance of precaution measures in the wake of new emerging variants.

ID496 Is Forgetfulnessnormal for your Age Global Burden of Mild Cognitive Impairment

Darius Foica[1], Sorina Maria Aurelian[2], Ruxandra Mihalache[2], Ana Capisizu[2], Andreea Zamfirescu[2]

[1]"Victor Babes" University of Medicine and Pharmacy, Timisoara, Romania

[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objectives: Some senior adults have more memory or thinking problems than other elderly their age. This condition is called Mild-Cognitive-Impairment_ (MCI). Risk of developing MCI increases with age. Conditions like diabetes, depression, stroke may increase a person's risk for MCI. People with MCI are still able to take care of themselves and do most of their normal daily activities. The clinical manifestations of MCI (DSMV:294.10(F02.80)_without-behavioural-disturbance) are not as severe as symptoms of Alzheimer's disease.

Methods: BA, 69-year-old-woman, admitted in Geriatric Department 'Sf. Luca' Chronic-Diseases-Hospital-Bucharest presented stepwise memory deterioration gradually instaled over 12–15 months (Hachinski Ischemic Score (6p.=mixed type:degenerative+vascular): repeating statements & questions, frequently losing items, forgetting things. Personal background: PTSD after job loss, minor head injuries, glass factory worker - (chemicals; noise; heat; stress). Presenting complaint: forgetfulness, preserved cognitive capacities, anxiety disorder (GAD), panic attacks. No problems with interpersonal relationships, functional in house activities. Past Medical History: High-Blood-Pressure,Hyperlipidemia,Hyperuricemia. Family History: mother = vascular stroke, forgetfulness, dementia.

Results: Rated independent on Geriatric scales: ActivitiesDalyLiving (ADL)=5p./6p.; Instrumental -ADL(IADL)=6,5p./8p.Yesavage-Geriatric-Depression-Scale (GDS)=4p./15p. (moderate), Mini-Mental-State-Examination (MMSE)=23p./30p. (mild dementia) losing on Orientation, Attention, Calculation, Registration recall = (short term recall) & Complex commands = (sentence-writing & shown-figure-drawing); Montreal-Cognitive-Assessment (MoCA) Test= 16p./30p. Clock-Drawing-Test (CDT)=4p./10p-Sunderland score. Edmonton-Frail-Scale=7p./17p.(vulnerability), AVLT-(Rey,1964)=17p./36p with affected: attention, language usage, visuospatial skills. Laboratory: TSH=4.26mIU/mL, D. vitamin=60.57ng/mL, CBC (complete-bloodcount)=normal, LDLc=189.97mg/dL, total_ Cholesterol=265.55mg/dL, Triglycerides=247.14mg/dL, Uric-Acid=6,15mg/dL. Carotid-Doppler-Ultrasound: Non-stenotic Atherosclerotic_Plaques on ECA & ICA. Brain-Native-CT-scan: No acute vascular lesions. Cerebral and cerebellar atrophy. Microlacunarism. Leukoaraiosis.

Conclusions: Final Diagnosis: Mild neurocognitive disease of mixt etiopathogeny. Mild Cognitive Impairment (MCI), an intermediate state of cognitive function between normal aging and those fulfilling the criteria of dementia (prevalence=10-20% in persons older than 65 y.o.in studies). Brief mental status examination or MMSE often insensitive. More useful measures include Montreal-Cognitive-Assessment. Neuropsychological testing may be helpful in particularly mild cases, but not routinely. Exclusion of other organic disease or deficits like B12, TSH is mandatory. Treatment: acetilcolinestareze inhibitors, multimodal interventions (physical exercise, diet, cognitive stimulation).

ID498 Surveillance of Clostridoides Difficile Infection During 2016-2021, in an Emergency Children's Hospital, in Bucharest

Carmen-Daniela Chivu[1,2], Mihaela Nicoleta Bercea[3], Carmen Cristina Vasile[3], Alina Stocheci[4], Cristina Adriana Becheanu[1,2], Daniela Pacurar[1,2], Daniela Pitigoi[1,2], Maria Dorina Craciun[1,2]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

[2]"Grigore Alexandrescu" Emergency Clinical Hospital for Children, Bucharest, Romania

[3]"Prof. Dr. Matei Bals" National Institute for Infectious Diseases, Bucharest, Romania

[4]Bucharest Emergency University Hospital, Bucharest, Romania

Objectives: We aim to present clinical and epidemiological characteristics of pediatric Clostridioides difficile infections (CDIs) admitted to an emergency children's hospital in Bucharest, Romania, between 2016-2021.

Methods: We performed an observational retrospective study using data from ICD surveillance forms, medical records of the cases, and Epi Info (CDC, Atlanta, US) software for the data analysis.

Results: 46 cases of CDIs were recorded in the studied period. The median age was 8,5 (IQR:3-12). The frequency of cases by age was: 28% at 0-4 years old, 28% at 5-9 years old, 33% at 10-14 years old, and 11% at 15-19 years old, with no difference between gender.

Most of the CDIs (40%) were admitted to the hospital during the spring months (Mars, April, May). 32 (69.6%) of the cases were from pediatric wards, 11 (23,9%) from surgical wards, and 3 (6,5%) from ICU. The median length of hospital stay was 7,5 days (IQR:2-13).

History of antibiotic therapy during the 3 months before hospital admission was recorded at 27 (58.7%) patients and 14 (30,4%) received antibiotics just before symptoms onset. The most common antibiotics were Cephalosporins, followed by Quinolones.

Gastric acid suppressors and cytostatic drugs were administered in the last 3 months in 21,7% and 4,4% of cases, respectively.

Four cases (8,7%) reported digestive tract surgery in the previous 2 weeks. Contact to a confirmed CDI case was identified in 4 (8,7%) cases.

Hospitalization in the past year was identified in 33 (71.8%) patients; 21 (63,6%) had the admission in the previous 4 weeks. Two cases (4,3%) had complications.

Twenty-seven cases (58,7%) were classified as hospital-acquired infections (HAIs).

Conclusions: A small number of ICD cases were recorded in the studied period but the majority were HAIs. Antibiotic treatment was common, indicating the need for antibiotic stewardship programs in the pediatric population.

ID502 The Knowledge and Behavior Regarding Influenza and COVID 19 Vaccination Among Medical Students from Bucharest, Romania

Mihaela Nicoleta Bercea[1,2], Bianca Georgiana Enciu[1,3], Carmen Cristina Vasile[1,2], Andreea Marilena Pauna[1,4], Carmen Daniela Chivu[1,5], Maria Dorina Craciun[1,5], Daniela Pitigoi[1,2]

[1]„Prof. Dr. Matei Bals" National Institute for Infectious Diseases, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[3]National Institute of Public Health, Bucharest, Romania
[4]Military Medical Institute, Emergency Clinical Hospital for Children "Grigore Alexandrescu", Bucharest, Romania

Objectives: We aim to present medical students' knowledge and behavior regarding influenza and COVID-19 vaccination.

Method: An electronic questionnaire with 16 questions was developed to be filled by medical students attending the first course of Epidemiology, during the 2021/2022 academic year. Data were analyzed using Microsoft Excel.

Results: In the study period, 784 students participated, 71.6% were female, median age 24 years. 74.5% were studying General Medicine and 25.5% Dental Medicine. 96% were vaccinated against COVID-19. The reason for not getting vaccinated were previous infection (1.4%), not having enough information about safety and efficacy (0.9%), lack of trust (0.5%). 97.1% considered influenza vaccination as the most effective way to prevent influenza and 85% knew that the vaccine is recommended for medical personnel. Only 36% received influenza vaccine during 2020-2021 season. Lack of time (37,1%), never been sick (12,4%), vaccine unavailability (12,1%), the main reason for not getting influenza vaccine.Most students found as important reasons for getting vaccinated against influenza and COVID-19: protecting themselves (94%), their families (89%) and the patients (88%). 90.8% used reliable sources for vaccine information (medical literature and health authorities' official bulletins).

Conclusions: The study revealed a high rate of COVID-19 vaccination among students. Further efforts are needed to improve the adherence of medical students to the annual influenza vaccination, including vaccination campaign targeting students, as in the case of COVID-19. The study highlights the importance of knowing the perception of medical students regarding vaccines to create educational program targeted to their needs.

*All authors had equally contributed.

ID509 Problematic Hailey-Hailey Disease in a 47-year-old Female

Ioana Alexandra Badircea[1], Marius-Cristian Valcoci[1], Radu Mihai Bușca[2], Sabina Zurac[2], George Sorin Tiplica[1,3]

[1]Second Department of Dermatology, Colentina Clinical Hospital, Bucharest, Romania
[2]Pathology Department, Colentina Clinical Hospital, Bucharest, Romania
[3]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objectives: Hailey-Hailey disease (HHD), also being known as familial benign chronic pemphigus, represents an acantholytic disease, characterized by the rupture of the desmosomal junctions between the keratinocytes. HHD is an uncommon autosomal dominant disorder, caused by the mutation of the ATP2C1 gene.The manifestations include painful erosions, vesicles, pustules, itchy plaques with scaly borders and rhagades. Dyskeratosis can be also find in surrounded histopathologic examination. Herein, we report the case of a patient with Hailey-Hailey disease, which was not recognized from the first presentation.

Methods: A 47-year-old female patient presented to the Dermatology Department for itchy plaques, with multiple painful erosions, located at the sites of friction. The lesions started 30 years ago as itchy vesicles and pustules, located in the inguinal area, gradually expanding in size and location, becoming also painful, with overlapping episodes.

The personal medical history revealed several dermatologic misdiagnoses and an allergic asthma diagnosed in 2020. The family medical history includes episodes of itch in the patient's mother.

The physical examination showed itchy plaques located in flexure areas, imprecisely demarcated, with painful erosions and macerated skin, being surrounded by satellite papules. On the nuchal region there were several pustules and crusts. The differential diagnosis included: inverse psoriasis, intertrigo, Darier disease and pemphigus vulgaris.

Results: Histopathologic results showed changes compatible with the diagnosis of familial benign chronic pemphigus (Hailey-Hailey disease): minimal hyperkeratosis, moderate acanthosis, moderate intraepidermal acantholysis and large loss of cohesion among keratinocytes. Direct microscopic examination for fungal elements showing the presence of fungal hyphae and a bacterial culture showing the presence of MRSA Staphylococcus aureus. The Koebner phenomen occurred around the excision lesion: small vesicles and crusts on an erythematous skin. The patient was treated for both infections with topical medication. Under treatment with local high-potency corticosteroids and antimicrobials, the lesions are now in a remitting phase, with decreasing inflammation and erosions.

Conclusions: Hailey-Hailey disease is an uncommon and invalidating condition. Due to its rarity, the diagnostic is often delayed. Because of the multiple flares of its course, the management of HHD can be difficult. Although this disease can be a challenge, early observation of the clinical manifestations and positive familial historical, can lead to an accurate diagnosis.

ID511 Hydrocystoma in a 86-year-old Female with Personal history of Basal Cell Carcinoma and Hypothyroidism

Ioana Alexandra Badircea[1], Marius-Cristian Valcoci[1], Radu Mihai Buscă[2], Sabina Zurac[2], George Sorin Tiplica[1,3]

[1]*Second Department of Dermatology, Colentina Clinical Hospital, Bucharest, Romania*
[2]*Pathology Department, Colentina Clinical Hospital, Bucharest, Romania*
[3]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Objectives: Hydrocystomas are benign tumors of the skin appendages, and can be divided, based on their epithelium types, into eccrine and apocrine. These lesions are caused by the deformation of the morphologic unit of the sweating gland, thus resulting in the distention of their ducts, with obstruction and secondary retention of the sweat. They affect both male and female adults, and are often found on the neck and face, including the periorbital region. Their clinical appearance consists of a dome-shaped cyst, with translucid structure, smooth surface, grey or pale pink color without other symptomatology. Hydrocystoma, especially multiple ones, are associated with Graves disease. Herein, we report the case of a patient with a hidrocystoma on her left zygomatic region, who was previously diagnosed with a basal cell carcinoma and hypothyroidism.

Methods: A 86-year-old female patient presented to the Dermatology Department with a cyst, filled with clear fluid, located on the left zygomatic region. The lesion occurred one year ago as a small papule, gradually expanding in size in the past 3 months, with no other symptomatology associated.

The personal medical history revealed a basal cell carcinoma, removed through standard surgical excision in 2021, essential primary hypertension and hypothyroidism.

The physical examination showed a unique, tense, grey, dome-shaped cyst, filled with clear fluid, that measured 1,3/1 cm, well-demarked, located on the left zygomatic region.

We included in the differential diagnosis basal cell carcinoma (regarding the personal medical history of the patient), epidermal inclusion cyst and mucoid cyst.

Results: Histopathologic results showed characteristics compatible with the diagnosis of hydrocystoma: unique dermal cystic lesion, with its lining consisting of cuboidal or flat cells, with a small amount of eosinophilic cytoplasm, with round central nuclei; cells being placed on a single or two layers, with minimum inflammatory infiltrate and minimum fibrosis being present. The patient underwent classical surgical excision for the lesion, followed by histopathological examination, that showed the previous result.

Conclusions: Hydrocystoma is a rare and benign lesion, that occurs on the cervical region, mainly on the face and neck. It can be associated with hyperthyroidism. Due to its rarity and resemblance to basal cell carcinoma, the optimal management includes classical surgical excision and histologic study. The presented case was atypically associated with hypothyroidism instead of hyperthyroidism.

ID512 D-dimers in Decompensated Liver Cirrhosis Marker of Thrombosis in the Auto-anticoagulated Patient or Marker Revealing Other Pathologies?

Cristiana Grigore[1], Corina Grigoriu[1], Lavinia Alice Balaceanu[1,2]

[1]*„Sf. Ioan" Emergency Clinical Hospital, Bucharest, Romania*
[2]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Background: Although the patient with advanced liver cirrhosis with spontaneously increased INR was considered to be autoanticoagulated until recently, venous thrombosis is common in these patients. Disorders of coagulation processes and fibrinolysis from liver failure may be the source of investigations for related pathologies that may worsen the patient's prognosis.

Objectives: investigation of high value of d-dimers in advanced liver cirrhosis, establishing the particularities of diagnosis and treatment

Methods: clinical examination, laboratory tests, imaging investigations, interdisciplinary consultations.

Results: Case presentation: A 65-year-old patient presents to the emergency room for temporal disorientation, bradylalia, bradypsychia, and abdominal enlargement. He has a medical history of alcoholic liver cirrhosis for about 15 years and type II diabetes in treatment with oral antidiabetics. The objective examination on admission reveals a moderate general condition, muscular atrophies at the scapular and pelvic belts, discreetly icteric skin and mucous membranes, calf edema, volume increase of the abdomen by ascites fluid bradylalia, bradypsychia, no signs neurological outbreak. Biological examination reveals hypoalbuminemia, hyperbilirubinemia with predominant direct component, cholestasis syndrome, hypocholesterolemia, increased spontaneous INR, increased quantitative D-dimers, negative HBV and HCV viral immunology, thrombocytopenia, lymphopenia. According to the Child Pugh score at admission, the patient is in class B (score 8). Cardiac ultrasound shows posterior mitral ring calcification, aortic ring calcification. Abdominal ultrasound shows hepatomegaly with splenomegaly, enlarged splenic vein in the hilum with multiple venous dilatations, interhepato-renal fluid. Contrast-enhanced abdominal MRI shows cirrhotic liver with uncertain hepatic nodular lesion, indirect signs of portal hypertension, and left basal pleurisy.

Conclusions: Elevated values of d-dimers in decompensated liver cirrhosis may be indicative of various pathologies, both portal vein thrombosis, hepatocellular carcinoma and hyperfibrinolysis, which determines the prognosis of the disease.

ID513 Eosinophilic Gastroenteritis a Rare Cause of Severe Malnutrition in Children

Catalin Boboc[2], Malina-Elena Anchel[2], Aurelia Calin[2], Irene Ungureanu[2], Anca Andreea Boboc[1,2], Mihaela Balgradean[1,2], Felicia Galos[1,2]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]"Marie Sklodowska Curie" Emergency Children's Hospital, Bucharest, Romania

Severe malnutrition in childhood is considered a global burden. Micronutrient and protein-calorie deficiencies encompass a clinical spectrum from a minor nutritional problem to a myriad of life-threatening disorders. Eosinophilic gastrointestinal diseases (EGIDs) comprise a group of chronic, inflammatory diseases of the gastrointestinal tract, that are characterized, clinically, by symptoms related to the dysfunction of the involved segments of the gastrointestinal tract, and histologically, by dense eosinophilic inflammation, in the absence of an identifiable secondary cause. The group of EGIDs comprises eosinophilic esophagitis, eosinophilic gastritis, eosinophilic gastroenteritis, and eosinophilic colitis.

We present a clinical case of a 2 and a half year old girl presented in our clinic for pitting oedema and alternating constipation and diarheea. History was negative for low protein intake. Cardiac, renal and liver causes were excluded. Screening for intestinal infections was negative. Endoscopy showed dudenal oedema with >50 eosinophilic/hpf duodenal mucosa on hystopatological exam. Based on these the diagnosis of eosinophilic gastroenteritis was establised. Because of the low nutritional status she was started on elemental diet and sistemic corticoids with favorable outcome.

In conclusion, although eosinophilic gastroenteritis is a very rare disease ipn children it should be taken into account when evaluating a child with gastrointestinal complaints and malnutrition.

ID514 Ultra High Density Mapping and Ablation of Typical Flutter in a Grown-up Congenital Heart Disease

Gabriela-Elena Marascu[1], Alexandru Deaconu[1,2], Silvia Deaconu[1], Radu Vatasescu[1,2]

[1]Clinical Emergency Hospital of Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Introduction: Congenital heart disease patients present therapeutical challenges related to anatomical particularities and scars from corrective surgeries.

Case presentation: A 35-year-old male diagnosed in 1988 with incomplet atrioventricular canal, who suffered multiple failed corrective surgeries presented for dyspnea, fatigue at light efforts and irregular palpitations with heart rate of 90-130 beats per minutes. Electrocardiogram on admission showed a regular tachycardia with right bundle branch block and isolated premature ventricular beats. Transtoracic echocardiography detected biventricular and biatrial dilatation, with dysfunctional left and right ventricle, with mitral and tricuspid regurgitation. Transesophageal echocardiography revealed no residual interventricular or interatrial septum shunts with normofunctional mitral prosthesis and without trombi. Electrophysiology study with ultra high density mapping was carried out and documented typical atrial flutter. Ablation was successfully performed with subsequent demonstration of clockwise and counterclockwise block. Post-procedural echocardiography showed an improved systolic dysfunction, with a left ventricular efection fraction of 45%.

Discussion: Multiple corrective surgeries with repeated right atriotomies lead to a high risk for atrial arrhythmias. It is often difficult in operated grown-up congenital heart disease patients to correctly diagnose atrial arrhythmias on ECG alone. In our patient ultra high density mapping during electrophysiological study helped establish the correct diagnosis. The important improvement of left ventricular ejection fraction post-ablation confirmed the tachycardiomyopathy.

Conclusion: Due to extensive atrial scarring and/or dilation, ECG might be difficult to interpret in operated congenital heart diseases patients. Electrophysiological study can diagnose the arrhythmia, its substrate and guide the ablation.

ID516 Pruritic Erythematous Lesions, not Always Benign Lesions

Beatrice Balaceanu[1], Cristian Dorin Gurau[2], Claudia Constantina Despan[3], Lavinia Alice Balaceanu[4]

[1]Elias Emergency University Hospital, Bucharest, Romania
[2]Clinical Emergency Hospital of Bucharest, Romania
[3]Colentina Clinical Hospital, Bucharest, Romania
[4]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Background: Mycosis fungoides is a skin involvement of the T cell non-Hodgkin lymphoma, sometimes with other determinations, like lymph nodes, blood or viscera. Skin lesions could be localized or diffused, as patches or plaques, erythroderma, or tumors. Genetic abnormalities and infectious agents were involved, but the cause remain unclear.

Objectives: investigation of pruritic erythematous lesions, establishing the particularities of diagnosis and prognosis

Methods: clinical examination, laboratory tests, imaging investigations, interdisciplinary consultations.

Results: Case presentation. We present the case of a 70 years old female patient with a history of pruritic erythematous lesions with immunohistochemical diagnosis of perivascular lymphocytic dermatitis with lesions of subacute spongiotic dermatitis, eczema type. One year later she was admitted for diffuse erythematous-scaly rash, with intense pruritus. Physical exam revealed enlarged multiple latero-cervical lymphadenopathy. Blood tests showed mild systemic inflammation. Latero-cervical ultrasonography found lymphadenopathy up to 50 mm, with thick hypoechoic parenchyma, intensely and diffuse vascularized who raised the suspicion of neoplastic disease. Contrast-enhanced computed tomography confirmed the adenopathy without visceral involvement. Histopathological and immunohistochemical tests of the cervical lymph node confirmed the diagnosis.

Conclusions: Heterogenous skin manifestations of mycosis fungoides with common pruritus, especially in the presence of suspicious lymphadenopathy raise the suspicion of T cell lymphoma. Inconclusive results on skin biopsies, even multiple, from specific lesions, with the most induration, lead to lymph node histopathologic and immunopathologic tests.

ID522 Obesity in Geriatric Population Functionality and Pathological Level Implications

Mihaela Roman[1,2], Ana Capisizu[1,2,3], Sorina Maria Aurelian[1,2], Ruxandra Mihalache[1,2], Andreea Zamfirescu[1,2,3]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]"Sf. Luca" Hospital for Chronic Disease, Bucharest, Romania
[3]Faculty of Midwives and Nursing, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objective: Evaluating association between obesity in geriatric patients and their functionality and related pathologies.

Method: Retrospective study, geriatric patients (N=100) hospitalized in the Geriatric Clinic Sfantul Loca Hospital for Chronic Diseases. Variables analyzed: age, sex, BMI, MNA, ADL, IADL, hypertension, dyslipidemia, hepatic steatosis.

Results: 82% female, 67% living in urban areas. Mean age 72.5 [51,94] (SD:10.230); 34% of hospitalized patients were young elderly (65-74 years). Most patients, about 2/3 of them are overweight or obese (BMI>25). 45% of patients suffer from obesity grades I, II and III (BMI>=30); mean BMI 29.8 [17.55] (SD: 6.677). 35.3% of the young elderly have grade I obesity (p=0.001). The evaluation of nutritional status (MNA) correlates positively and statistically significant with BMI (Pearson, r=0.213, p=0.034), so we can say that a low MNA score is correlated with a low BMI.

32% of patients are at risk of malnutrition, from which 31.2% are overweight (p=0.212). Grade II hypertension is present in: 83.3% patients with grade I obesity, 81.8% of grade II obesity patients, 70% of grade III obesity patients. Grade III hypertension is present in 30% of patients with grade III obesity all having statistically significant power (p=0.006). 40.4% of patients with dyslipidemia are overweight, 25% of patients with dyslipidemia have grade I obesity, only 7.7% of normal-weight patients have dyslipidemia, all being statistically significant p=0.005. 34% of patients have hepatic steatosis and 32.4% of patients with hepatic steatosis have grade I obesity (p=0.018). Independent patients (ADL 8) have a low percentage of obesity (p=0.020). Underweight patients and most patients with grade III obesity have a low degree of functionality.

Conclusions: Obesity has numerous consequences in the geriatric population, low functionality (dependency) being correlated with other pathologies such as: HBP, dyslipidemia, nonalcoholic hepatic steatosis. Independent patients suffer from obesity in a lower percentage.

ID523 Cognitive Decline and Dependency in Institutionalized Elderly

Adina Carmen Comorasu[1,2], Madalina Alecu-Mihai[2,3], Mihaela Roman[2], Maria Sorina Aurelian[2,3], Rucsandra Mihalache[2,3], Ana Capisizu[2,3], Andreea Zamfirescu[2,3]

[1]*Residential center for elderly people "Sf.Silvestru", Bucharest, Romania*
[2]*Geriatrics and Gerontology Clinic,"Sf. Luca" Hospital for Chronic Disease, Bucharest, Romania*
[3]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Objectives: The prevalence of cognitive impairment increases with age. We aim to determine the correlation between cognitive impairment and the degree of dependence of institutionalized elderly.

Methods: We analyzed all 13 institutionalized patients admitted in a ward at Residential care home for elderly "Sf.Silvestru" in July 2022, aged between 74 and 98 years. Patients evaluation was made through standardized tests for cognitive function (Mini-Mental-State-Examination-MMSE) and dependency level (Activities-of-daily-living-ADL,Instrumental-activities-of-daily living-IADL,Barthel-Index,dependency-score).

Results: In the study were included 8 women(61.5%) and 5 men(38.5%), mean age=88.77 years. The majority (92.3%) was represented by patients diagnosed with neurocognitive disorder, most common of degenerative etiology: dementia in Alzheimer's disease. Cognitive impairment:46.2% severe, 23.1% moderate, mild:30.8%. Dependency by ADL: 7.7% had 0 points(total-dependency) , 7.7% had the maximum of 10 points(independent) . More then half of the patients 61.5% had 0 points in IADL(total dependency). 15.4% of patients had a total dependency score(0 points) according to Barthel Index. Degree of dependence: 30.8% -level of major dependency, 15.4% -total depedency(level IA) and 15.4% with autonomy(level IIIA). Due to the reduced number of participants, we could not reach statistical power, yet we report a trend between cognitive impairement and functionality : mild and moderate cognitive impairment is corelated with low funtionality by ADL (p=0.275) and IADL(all patients with severe cognitive impairment were totaly dependent: IADL0/8(p=0.87), 66.7% with moderate cognitive decline had a high level of dependency: IADL 1/8(p=0.87); 50% of patients with severe cognitive decline had Ic-dependency- high (p=0.169).

Conclusions: Prevalence of cognitive impairment is higher in senior citizens' institutions compared to the general population. Severe neurocognitive disorders (dementia) represented the most common cause of total dependency in elderly institutionalized patients in our center. The study highlights the corelation between the increasing of degrees of dependency and the level of cognitive impairment among institutionalized elderly.

ID524 Impact of Biological and Targeted Synthetic Therapies over Total Cholesterol Values in Patients with Rheumatoid Arthritis

Iulia-Simona Chirica[1], Oana Vutcanu[1], Mihai Bojinca[1]

[1]*"Dr. I. Cantacuzino" Clinical Hospital, Bucharest, Romania*

Introduction: Biological and targeted synthetic therapy for rheumatoid arthritis can have an impact over total cholesterol. The objective was highlighting any modification of serum cholesterol values by comparing the values before and after starting the treatment.

Material and Methods: I performed a retrospective study in the internal medicine department of the Dr. Ion Cantacuzino Clinical Hospital. 40 patients with rheumatoid arthritis were included. 67.5% were not treated with statins, 15% were treated with statins before receiving the biological therapy and 17.5% received treatment with statins after receiving the biological therapy. 35% of patients received the JAK-inhibitor treatment, 22.5% received Tocilizumab and 42.5% received Adalimumab. Inclusion criteria: at least a year of biological therapy of interest, a paraclinical examination before receiving biological therapy and at least two assessments after the treatment initiation.

Results: The paired T test has been used to compare the cholesterol values before and after the specific treatment. For the entire group, the cholesterol values have increased in average by 14.9 mg%, CI 95% [24.65-5.14] mg%, p=0.004. The patients who were given the JAK-inhibitor treatment had increased cholesterol values in average by 27.63 mg%, CI 95% [43.89-11.37] mg%, p=0.003. Patients with Tocilizumab have shown increased cholesterol values in average by 10.08 mg%, CI 95% [41.36-13.78] mg%, p=NS. Patients who have received Adalimumab have shown increased cholesterol values in average by 6.95 mg%, CI 95% [23.36-5.66] mg%, p=NS.

Conclusions: The study has identified an important increase of total cholesterol values, statistically significant at the level of the entire group after the initiation of biological therapy, as well as at the level of patients with the JAK-inhibitor treatment. This suggests the fact that the impact of biological and targeted synthetic therapy on the lipid profile may require special attention on the therapeutic measures that involve monitoring this phenomenon.

ID529 The Role of Paracentesis in the Differential Diagnosis of Ascites - Case Report

Irene-Maria Ungureanu[2], Catalin Marin Boboc[2], Anca Andreea Boboc[1,2], Malina- Elena Anghel[2], Mara Ioana Iesanu[2], Elena Cotfasa[2], Ramona Cliveti[2], Aurelia Calin[2], Mihaela Balgradean[1,2], Felicia Galos[1,2]

[1]Division of Pediatrics, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Department of Pediatrics, "Marie Sklodowska Curie" Emergency Children's Hospital, Bucharest, Romania

Introduction: Ascites is defined as an accumulation of fluid in the peritoneal cavity. The most frequent etiologies are hepatic, cardiac, or renal diseases, although various inflammatory, metabolic, neoplasms, or infectious disorders should be included in the differential diagnosis. The most common symptoms encountered in children with ascites are abdominal pain with progressive distention, early satiety, weight gain, and shortness of breath. When children present with ascites of unknown cause, paracentesis may occasionally be a pivotal diagnostic technique.

Case presentation: We present a case of a 15-year-old girl, without personal or family pathological history, who was admitted to our hospital for progressive abdominal distention and loss of appetite. Abdominal ultrasound (US) revealed anechoic abdominal accumulation and the physical examination was suggestive of ascites.

Laboratory tests revealed only elevated inflammatory markers. Although CA 19-9, ACE, and alpha-fetoprotein levels were all within normal ranges, the CA-125 tumor marker was increased (336u/ml).Additionally, the abdominal computer tomography showed an enlarged right fallopian tube, raising a strong suspicion of pelvic inflammatory disease.

However, a decision of exploratory paracentesis was made. The peritoneal fluid analysis revealed leukocytosis with an elevated number of lymphocytes (67.8%), raising the possibility of peritoneal tuberculosis. Indeed, the Quantiferon test and the cultures were positive for Mycobacterium tuberculosis, and the patient was further referred to a specialized center.

Conclusion: Even though exploratory paracentesis is invasive procedure, it could be useful to determine the etiology of ascites, and also check for infections or neoplasms, so it should be the first-line in the procedural intervention of the diagnosis of ascites.

ID530 A Case of Erythrodermic Psoriasis in a 27-year-old HIV-Positive Patient

Iulia Elena Negulet[1,2], Alexandra-Irina Butacu[1,2], Gilbertina Stefan[3], Andreea Ana Maria Calen[3], Oana Luminita Constantin[3], Mariana Mardarescu[4], Rodica Ungurianu[4], Mihai Lucian Ciobica[5], Oana Ionescu[5], Bianca Sandulescu[5], Alexandru Bardas[6], Mihai Busca[7], Sabina Zurac[2,7], George Sorin Tiplica[1,2]

[1]2nd Department of Dermatology, Colentina Clinical Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[3]Intensive Care Unit, Colentina Clinical Hospital, Bucharest, Romania
[4]National Institute for Infectious Diseases "Prof. Dr. Matei Bals", Bucharest, Romania
[5]Central Military Emergency Hospital "Dr. Carol Davila", Bucharest, Romania
[6]Institute of Oncology "Prof. Dr. Al. Trestioreanu" Bucharest, Romania
[7]Department of Pathology, Colentina Clinical Hospital, Bucharest, Romania

Objective: Erythrodermic psoriasis represents a rare, potentially lethal form of psoriasis which may be triggered by emotional stress, alcohol consumption, intake of systemic corticotherapy, high exposure to UV light, infections such as HIV-infection. In HIV-positive patient, psoriasis may occur as a cutaneous manifestation and may be a proof that the infection is in progress.

Herein, we present a case of erythrodermic psoriasis in a young woman with a recent diagnosis of HIV-infection.

Methods: A 27-year-old female patient presented to the Dermatological Department with a widespread, scaly, erythematous eruption that involved over 90% of the body surface area. The cutaneous manifestations appeared ten months prior on normal-appearing skin. During these months the patient was admitted in multiple medical units where she received therapy with high levels of corticosteroids. Considering the altered general condition with persistent fever, episodes of desaturation and reduced mobility, the patient was transferred in Intensive Care Unit for rigorous monitoring.

Results and conclusions: A complete blood panel was conducted, including a complete blood count which identified moderate anemia with mild thrombocytopenia and neutropenia. Blood culture was positive for Acinetobacter spp and urine culture tested positive for Klebsiella spp. A skin biopsy was performed and the histopathological examination identified moderate hyperparkeratosis with small neutrophil collections, extensive areas of hypo-/agranulosis, moderate acanthosis. Direct immunofluorescence was negative.

Based on personal medical history, previous treatments (high levels of corticosteroids), the histopathological aspect of the prior samples, as well as the current clinical appearance and the results of the last histopathological examination a diagnosis of erythrodermic psoriasis was established. Supportive care therapy together with systemic therapy and local treatment were started.

In our case presentation, the main trigger factor for the appearance of erythrodermic psoriasis was the newly discovered HIV-infection. In this category of patients, the severity of psoriasis increases with decreasing immunity.

ID535 Obesity-Factor of Hepatocarcinogenesis in Chronic Hepatitis C

Marilena Stoian[1,2]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]"Dr. I. Cantacuzino" Clinical Hospital, Bucharest, Romania

Aim: To investigate whether obesity is a risk factor of hepatocarcinogenesis in chronic hepatitis C patients.

Methods: We retrospectively analyzed the incidence of hepatocellular carcinoma (HCC) among patients with HCV infection followed up at 5 hospitals. Between 2002 and 2022, a total of 1365 patients who were positive for HCV, negative for HBsAg, and without HCC visited the 5 hospitals and were followed up .They were divided into four groups according to BMI ;BMI <18.5,n=107;18.5< = BMI <25, n=980; 25<=BMI <30,n=251;30<BMI, n=27) and the cumulative incidence rates of HCC were compared , considering age, sex, alcohol intake , and liver function in multivariate analysis.

Results: There were 698 male and 667 female patients with the median age of 60 year (range 15-85). The follow –up period was 16.1+ 3.1 years, amounting to a total observation period of 8326 person-years. HCC developed in 371 patients, showing cumulative incidence rates of 10.8 %, 20.3%, and 38.9% at 3, 5 and 10 years, respectively. The incidence rates differed significantly among the BDI groups (p=0.007 by the long rank test). Univariate analyses showed that older age, male, comorbidity with diabetes mellitus, heavy alcohol intake, low albumin concentration, high AST level, low platelet count, and high AFP concentration were significant risk factors of HCC. Adjusting for these factors, multivariate Cox proportional hazard regression showed that obesity was an independent risk factor of HCC, with a hazard ratio of 1.795 (95% CI:1.074-3.000; p=0.0260) when25<=BMI <30 and 3.210(95%CI:1.469-7.016, p=0.0035) when 30 <BMI as compared to the patients with BMI <18.5.

Conclusion:: Obesity is an independent risk factor of hepatocarcinogenesis among chronic hepatitis C patients.

ID 537 Impact of COVID-19 Among Haemodialysis Patients - a Single-center Experience

Ileana Adela Vacaoiu[1,2], Elena Cuiban[1,2], Cristiana David[1,2], Daniela Radulescu[1,2], Larisa Florina Feier[2]

[1]Department of Nephrology, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Department of Nephrology, Sfantul Ioan Clinical Emergency Hospital, Bucharest, Romania

Objectives: COVID-19 has meant a great challenge for the medical world, coming with many unanswered questions for both patients and doctors. Hemodialysis patients represent a continuously growing category in Romania, in over 50% of cases kidney damage is due to diabetes, an independent risk factor for an unfavorable outcome, along with chronic kidney disease causing high mortality, infectious or non-infectious complications being much more frequent than in the case of other patiens. The study shows differences between diabetic, hemodialysis patients, compared to non-diabetic, hemodialysis patients who associates SARS-Co-2 infection.

Methods: The present study is retrospective, observational, conducted between November and March 2022. It includes a number of 101 hemodialysis patients, with a positive RT-PCR test, of which 42 patients with a long history of diabetes, the remaining 59 patients associating other comorbidities (hypertensive nephropathy 33.89%, obstructive nephropathy 11.86%, autodominant polycystic kidney disease 8.47%).

Results: Hypertension was most frequent associated in both groups, diabetics and non-diabetics, 100% and 89.8%, respectively, followed by ischemic heart disease and atherosclerosis, with oncological history being associated in a lower proportion, 7.1%, 20, 3% respectively; supplemental oxygen was necessary in both groups, 48.8% and 49.1% respectively; in the case of diabetic patients mechanical ventilation was more frequently required. Obesity was observed in higher proportion in diabetics. Statistically significant differences were observed between the two groups, when analyzing anemia, inflammatory status and albumin.

Conclusions: Hypertension remains an important risk factor for an unfavorable evolution in diabetic patients, positive for COVID-19, together with obesity increasing mortality in this category, reiterating once again the importance of controlled blood pressure values and BMI. Also, we bring in attention the importance of multidisciplinary collaboration in treating diabetic, hemodialysis patients, considering the risk of cardiovascular events, much increased in this category.

ID 542 New Molecular Biomarkers in The Evaluation of Romanian Patients with Chronic Viral Hepatitis B Infection

Marina Manea[1,2], Dimitri Apostol[1], Mirela Iacob[1,2], Victor Stoica[1,2], Carmen Preda[1,2], Mircea Diculescu[1,2], Ileana Constantinescu[1,2]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Fundeni Clinical Institute, Bucharest, Romania*

Objectives: The unfavorable complications of chronic Viral Hepatitis B (VHB) infection encourage scientists to find new biomarkers for the rapid evaluation of patients during various phases of this disease. During the last decade several microRNAs have been studied as potential biomarkers, but their usage on a large scale basis has been limited by normalization difficulties. On the other hand, research conducted with this purpose in Romania is scarce. Our study offers a new view on the subject of expression analysis of microRNA in Romanian patients with chronic VHB infection.

Method: We included 6 controls (healthy people) and 14 patients with chronic VHB infection. All of them were primarily evaluated and investigated with routine blood tests. For all of them we determined the expression of miR-146 and miR-122 using a RT-PCR method. We improved the normalization of the obtained data with two methods, one being based on a delta Ct statistics, and the other one using the NormFinder software. For the statistical analysis we used the SPSS software.

Results: Of the two microRNAs, only miR-122 seemed to be stimulated in chronic VHB patients compared to healthy people. The expression of microRNAs seemed to be related to cell cycle events and TGF-beta activity. A possible association between microRNAs might improve the schemes used for the evaluation of patients.

Conclusions: Our research opens a new pathway towards future prognostic studies by using a microRNA technique. MiR-122 might be a potential biomarker for the evaluation of patients with complicated chronic VHB infection.

ID 543 Not All Q Waves Diagnose Myocardial Necrosis A Case of PSVT with Elevated Troponin and Concomitant COVID 19 Infection

Laura Adina Stanciulescu[1,2], Alina Scarlatescu[1,2], Radu Vatasescu[1,2]

[1]*Emergency Clinical Hospital Bucharest, Bucharest, Romania*
[2]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Introduction: Wolff-Parkinson-White syndrome (WPW), with its typical pre-excitation electrocardiographic triad of short PR interval, delta wave and QRS complex widening can easily mimic a myocardial injury, lending to a complex differential diagnosis.

Case presentation: A 55 year old male patient without cardiovascular risk factors (CVRF) is presented to the Emergency Room for a 10-hour history of retrosternal chest pain reffered to the left upper arm and the interscapular area. The ECG upon admission showed a supraventricular tachycardia with narrow QRS complex (AVRT), HR of 220 bpm, with subsequent ECGs upon arrhytmia termination showing Q waves and minimal ST segment elevation in DII, DIII, aVF, short PR interval and delta wave suggestive for a left postero-septal accesory pathway. Blood biochemistry showed an elevated hsTnI and NTproBNP. The patient tested positive for Sars Cov 2 and HRCT showed moderate bilateral interstitial pneumonia. The echocardiogram showed regional wall motion abnormalities (inferior and infero-lateral wall hipokinesia), with a 45% left ventricular ejection fraction (LVEF). A coronary angiography is performed, highlighting a 60% LAD stenosis. The electrophysiological (EP) study confirmed the left postero-septal accesory pathway and a radiofrequency catheter (RFC) ablation was performed, without any inducible arrythmia at the end of the procedure. The patient was discharged with complete resolution of the initial ECG and echocardiographic abnormalities.

Discussion: WPW patients may present ECG and biological abnormalities that might be suggestive of myocardial necrosis. The differential diagnosis includes acute coronary syndromes (ACS) and viral myocarditis. The troponin and NTproBNP rise associated with very fast PSVT in WPW patients can additionally make the differential diagnosis difficult.

Conclusions: Q waves and elevated troponin levels do not always diagnose myocardial infarction, as WPW patients may present similar ECG and biological pathological changes during their PSVT episodes. In these cases, the dissapearence of the Q waves together with the narrow QRS complex during PSVT easily exclude myocardial necrosis.

ID551 AGAPE Project - How to Improve eHealth Literacy in Ageing People

Matei Teodorescu[1,2], Alina Iliescu[1,2], Ileana Ciobanu[1,2], Andreea Marin[1,2], Marius Nicolae Popescu[1,2], Mihai Berteanu[1,2]

[1]Discipline of Rehabilitation Medicine, Elias Emergency University Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

World population is ageing and health systems are overwhelmed. Many ICT-based solutions are designed and developed to help self and community-centered preventive, health and lifestyle monitoring and rehabilitation interventions for ageing people. Even if their usefulness is proven, most solutions remain in experimental model phase or the market product is hardly used, due to the lack of digital literacy of their target users - the older people.

Objective: "Active aGeing And Personalised service's Ecosystem" - AGAPE project aims at creating a platform integrating services to promote eHealth literacy, health and lifestyle monitoring and social inclusion.

Method: bibliographic research and co-creation with older people and caregivers.

Results: AGAPE is an advanced healthy ageing services ecosystem leveraging on enhancement of existing local services through: innovative ICT components, specific education programmes, coaching sessions and innovation management services, all of them composed in an integrated approach for Active and Healthy Ageing. AGAPE multidisciplinary team presents optimal modalities to increase innovation adoption by improving digital literacy of older generations.

Conclusion: In order to improve digital eHealth literacy in older people, one needs to increase people's trust in the privacy, reliability and the benefits of using such technologies. The users have to develop new abilities. Real-time, appropriately designed and quantified feedback from the technology and the continuous support of the caregivers and technology developers increase users' self-confidence, increase the usability of such technologies and the consequent benefits for all.

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ID552 CoachMyLife Project - Computer Vision for Errorless Learning

Ileana Ciobanu[1,2], Andreea Marin[1,2], Alina Iliescu[1,2], Mihai Berteanu[1,2]

[1]Discipline of Rehabilitation Medicine, Elias Emergency University Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Ageing healthy in place and living independently at home for as long as possible are must-do for the nowadays ageing society. Activities of Daily Living (ADLs) require certain physical and cognitive abilities as well as motivation in order to get optimal cost-efficient performance, meaningful results and management, so to ensure the functional independence of ageing people. Cognitive and physical decline related to normal ageing and to the chronic health conditions reduce the ability of older people to perform ADLs in cost-efficient and safe manner.

CoachMyLife AAL Project aims to create an AI-driven solution using computer-vision - based procedures to interactively assist older people with minor neurocognitive disorder in ADLs. The solution applies errorless learning strategies to help the user keep reality-oriented and able to perform the ADLs.

Objective: To present the results of iterative testing and development of the CoachMyLife solution.

Method: bibliographic research, clinical reasoning, co-creation activities, usability testing.

Results: The functional and non-functional requirements of the CoachMyLife solution are presented. The interfacing as well as the moment and the content of the interactions between user and solution were thoroughly developed. Along with reminders for important activities and events, motivational quotes and step by step guidance through activities are provided. Computer-vision procedures ensure cognitive assist-as-needed interventions.

Conclusion: The development of context-sensitive advanced assistive technologies is not an easy task, as AI must be trained to provide personalised assistance, based on evidence-based data and logical decisions.

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ID553 PAIR Project - Physical Activity after Hip and Knee Replacement

Alina Iliescu[1,2], Ileana Ciobanu[1,2], Matei Teodorescu[1,2], Mihai Berteanu[1,2]

[1]Discipline of Rehabilitation Medicine, Elias Emergency University Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Technology means not only innovative hardware and software, but also managing evidence to generate new knowledge, new intervention methodology and programs. PAIR project aims at increasing awareness regarding the importance of physical activity after knee and hip replacement and at providing evidence-based exercise guides for patients and therapists as well.

Objective: To present the results of the systematic reviews developed during PAIR project, along with the content of the physical exercise guides developed during PAIR project.

Method: Bibliographic research, along with co-creation activities.

Results: Recommendations regarding leisure time and sports activities after knee and hip replacements are lacking, as there is lack of information regarding any long-term strategy of maintaining physical functioning of this population. This was a gap PAIR project team tried to cover, as many of the persons undergoing knee and hip replacement are older people, presenting with osteoarthritis (among other health conditions), weakened muscles, lower limb stiffness, altered gait patterns and high risk of fall. Studies indicate that strengthening exercises and functional tasks are beneficial in these respects.

Conclusion: There is limited awareness regarding the importance of physical activity after knee and hip replacement, even if studies show improvement of functioning, activity, participation and quality of life if efforts are done in this direction. Not only physical functioning improves, but also cognitive functioning, activity level increases as well as social engagement. Specific physical exercises are more beneficial than others and even some specific sport activities can be practiced after knee and hip replacement.

Acknowledgment: The research was funded within the PAIR project by Erasmus + Sport (grant agreement N.613008-EPP-1-2019-1-IT-SPO-SCP).

ID554 SENSE-GARDEN Project - Emotional Reminiscence Through Multimodal Stimulation

Andreea Marin[1,2], Ileana Ciobanu[1,2], Alina Iliescu[1,2], Rozeta Draghici[3], Mihai Zamfir[2], Mihaela Zamfir[4], Marius Nicolae Popescu[1,2], Ronny Broekx[5], Artur Serrano[6], Mihai Berteanu[1,2]

[1]Discipline of Rehabilitation Medicine, Elias Emergency University Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[3]Ana Aslan National Institute of Gerontology and Geriatrics, Bucharest, Romania
[4]Synthesis of Architectural Design Department, Ion Mincu University of Architecture and Urbanism, Bucharest, Romania
[5]ePoint, Limburg, Belgium
[6]Department of Neuromedicine and Movement Science, Norwegian University of Science and Technology, Trondheim, Norway

Major neurocognitive disorder is challenging for people with this health condition and for all those providing care, as well. Non-pharmacological multicomponent interventions bring benefits by improving mood, behaviour and quality of life.

SENSE-GARDEN project aimed at creating media and ICT-based garden-like environments where users may have multiple multisensory meaningful personalised reminiscence experiences. The goal is to use elicited emotional memories to support reality orientation through cognitive and physical training adapted to real needs in a flowing experience.

Objective: To present the impact of the application of the innovative SENSE-GARDEN intervention intensively on people with major neurocognitive disorder.

Method: Case-series, quasi-experimental study.

Results: The intensive program of multimodal stimulation – based reminiscence therapy interventions improves cognitive functioning, whole reality orientation of participants and increases their activity and participation abilities and performance.

Conclusion: Personalised interventions providing smooth experiences and engaging participants in attentively guided non-traditional cognitive and physical training provide important benefits for people with major neurocognitive disorder, as well as for their caregivers.

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ID555 CoMControl Project - a New Approach for Gait Rehabilitation

Ileana Ciobanu[1,2], Doina Ioana Badea[1,2], Alina Iliescu[1,2], Georgiana Ionela Paduraru[3], Constantin Romica Stoica[3], Valentin Barbu[3], Mihaela Anca Alexe[3], Petre Lucian Seiciu[3], Mihai Berteanu[1,2]

[1]Discipline of Rehabilitation Medicine, Elias Emergency University Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[3]Department of Machine Elements and Tribology, Faculty of Mechatonics, University POLITEHNICA of Bucharest, Romania

Many different advanced rehabilitation technologies are aimed at helping people with locomotion disabilities regain functional gait. Their usage is hindered many times because of equipment costs, lack of appropriate training environment, lack of training of the therapists in using it, patients' fear and reluctancy of using unknown technologies etc.

CoMControl proposes a mechatronic solution based on the control of the equipment upon the center of mass of the user. The CoMControl innovative assistive system is installed on a roller endowed with an innovative harness aimed to enable the induced constraints.

Objective: To present the results of the first lab testing of the CoMControl solution.

Method: functionality testing, usability testing, gait analysis testing.

Results: CoMControl equipment maintains user in upright position and supports the natural movements of the pelvic girdle during gait movements, in a safe and controlled manner. Constraints are induced to the movements of the pelvis by smooth and precise push and track actions aimed to support the optimal displacement of the center of mass of the user in the three dimensions of space and in time. It reduces excessive sway and improves symmetry, enabling a controlled pattern of trajectories and body mass shifts to build optimised locomotion at functional speed.

Conclusion: Easy to don and doff, the system is controlled by user from the dashboard installed on the roller and can assist user in locomotion on smooth surfaces, supporting user in daily activities as well as in gait training.

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ID557 SI4SI Project - Smart Solution for Social Isolation

Ileana Ciobanu[1,2], Andreea Marin[1,2], Alina Iliescu[1,2], Rozeta Draghici[3], Mihai Zamfir[1], Mihaela Zamfir[4], Matei Teodorescu[1,2], Marius Nicolae Popescu[1,2], Mihai Berteanu[1,2]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Discipline of Rehabilitation Medicine - Elias University Hospital, Bucharest, Romania
[3]"Ana Aslan" National Institute of Gerontology and Geriatrics, Bucharest, Romania
[4]Synthesis of Architectural Design Department, Ion Mincu University of Architecture and Urbanism, Bucharest, Romania

Social isolation has many determinants and even more outcomes, related to health and lifestyle behaviour, in a vicious cycle. Ageing is one important risk factor of social isolation, because of losing connections due to retirement and of the inherent reduction of one's circle of friends and relatives. Ageing comes also with chronic health conditions and frailty, generating different sorts of disabilities, reducing the ability to engage in social activities. In order to prevent and fight social isolation, one must improve his capacity and his performance in this respect. SI4SI project proposes a digital solution aimed to improve capabilities and to provide opportunities for older people's social engagement.

Objective: To present the steps of the development of SI4SI smart solution for social isolation of older people.

Method: The solution is a result of clinical reasoning, UI and UX development specific procedures, bibliographic research and co-creation activities with future users.

Results: We present the way user requirements are collected, the manner system requirements are developed and the normal data flow between the user, the smart environment proposed and the SI4SI platform.

Conclusion: In order to improve social engagement of older people, through the means of ICT, one must provide a safe and inviting virtual environment, appropriate events and networking capabilities, as well as one must offer user the means to improve their physical and cognitive condition, in order to enable them to perform their own Activities of Daily Living in cost-efficient manner. Thus, we to help ageing people boost the energy, self-confidence, mood and motivation to engage in the life of their family and friends.

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ID560 Incidental Discovery of Chronic Lacunar Infarction in the Head of the Caudate Nucleus - Pathophysiological Considerations and Retroactive Etiologic Diagnosis of Depressiv Syndrome - Case Presentation and Narrative Review

Aurelian Anghelescu[1], Virginia Rotarescu[2]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Emergency Clinical Hospital Prof. Dr. Bagdasar Arseni, Bucharest, Romania*

Background: Imagery studies on the topography, volume, and morphology of subcortical nuclei in patients with post-stroke depression supported the role of subcortical structure changes in the pathophysiology and pathogenesis of mood alterations.

Method: An advanced PubMed search targeting the syntax of keywords ((caudate nucleus) AND (stroke)) AND (depression) found 26 biomedical publications from 1984 until 2022. Fifteen papers focusing on post-stroke depression associated with isolated caudate nucleus lesions were selected.

Results: A right-handed 71-years female with a personal pathological history of a depressive syndrome (since 12 years ago), postural hypotension, and arthritic disease is presented. No neurological pathological signs were detected. ECG had a normal aspect. TA 90/60 mm Hg (left-right), AV 90 sinus rhythm. The cardio-mediastinal and pleuro-pulmonary aspects were within normal limits.

A native brain CT scan incidentally detected an infra-centimetric lacunar area (of a maximum of 6 mm) at the level of the right caudate nucleus, with no supra- or infratentorial processes.

High serum triglycerides (241 mg/dl) and moderate cholesterol levels (206 mg/dl) were detected.

The psychological evaluation was difficult and time-consuming because the patient was hearing-impaired and semi-illiterate. She had moderate cognitive degradation, and poor attention and memory levels. The HARD score was 58. Severe masked anxiety-depression disorder, with a moderate emergency index, was diagnosed, requiring increased vigilance.

The patient received anxiolytic and antidepressant medication, lipid metabolism modulators, neurotrophic, and nonsteroidal anti-inflammatory medication.

A normally salted diet, with a reduced quantity of saturated lipids, was recommended at discharge.

Discussion: The clinical case illustrates an elderly woman with dyslipidemia and atherosclerosis, as risk factors for cerebral small vessel disease, and an incidentally discovered lacuna in the head of the caudate nucleus, as a possible etiopathogenic factor of depression.

Conclusion: Uni- /or bilateral, small or isolated small caudate lesions (without additional involvement of the adjacent internal capsule and/or periventricular white matter) strategically disrupt the frontal-basal ganglia-thalamus-cortical net and are associated with an increased risk of developing neuropsychiatric post-stroke complications, such as abulia, apathy (isolated) or often associated with depression, cognitive impairment.

ID563 Rehabilitation of Tetraplegia Post spinal Cord Injury - Qualitative Analysis of Information Posted on Youtube as a Complementary Source of Medical Education for Physiothe Students, in the Context of the Covid Pandemic

Lidia Johana Ionescu[1], Aurelian Anghelescu[1]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Introduction: YouTube is a website that allows vloggers to share videos publicly for all users who will access this platform. In recent years, it has also become known among patients, students, and young medical staff in order to obtain information with medical content of varying complexity. The accuracy and quality of information about quadriplegia after cervical spinal cord injury posted on YouTube are not fully known.

Objectively the study analyzed and evaluated the reliability and quality of Youtube videos related to quadriplegia.

Material and methods: Using the keywords "post SCI tetraplegia", "tetraplegic recovery" we searched on the site. Of the 230 videos viewed and analyzed, 120 meet the quality criteria for the scientific content. The number of likes/dislikes, days since the upload, and the credibility of the source of the video clips were analyzed. For an objective qualitative analysis and to assess the reliability and quality of the videos, the DISCERN scales and the global quality scale (GQS) were used.

Results: Of the 120 videos analyzed, 87.5% were considered educationally useful, while 12.5% contained confusing (erroneous, incomplete) scientific information. Of most of the videos, 60.83% had a high quality, 26.66% were rated as having an intermediate quality, and 12.5% were rated as having a low informational quality. Videos published by health institutions and professional organizations had higher DISCERN and GQS scores, indicating higher reliability and quality.

Discussions: The study demonstrated that the majority of YouTube videos can provide useful information to the physical therapy student, supplementing the information received during the lecturing course and being able to partially compensate for the lack of direct, interpersonal student-patient contact during the isolation period during the Covid pandemic. However, students should be aware that YouTube does not share all information with appropriate scientific content.

ID565 Rehabilitation of Patients with Lumbar Disc Herniation - Qualitative Analysis of Information Posted on Youtube, as a Complementary Source of Medical Education for Physiotherapy Students in the Context of the Covid Pandemic

Andreea-Iuliana Micloiu[1], Aurelian Anghelescu[1]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Introduction: YouTube is a popular video site frequently visited by patients and healthcare professionals, searching for medical information. The accuracy and quality of information focusing on lumbar disc herniation on YouTube are not fully known.

Objective: The purpose of this study was to assess the reliability and quality of scientific content of videos on the website, related to lumbar disc herniation.

Material and method: A Youtube search using the keywords "lumbar disc herniation", "lumbar disc herniation physical therapy", "exercises for lumbar disc herniation", "lumbar disc herniated rehabilitation", "lumbar disc herniation subacute phase exercises ", "exercises de phase subaiguë de hernie discale lombaire", "ernia del disco lombare esercici di fase subacute" was performed. The instruments to assess video quality are the DISCERN and the Global Quality Scales.

Results: Of the 210 videos screened, 117 met the inclusion criteria and were selected for analysis. The number of days since upload, the source, and reference to other informational sites on the topic were recorded as inclusion criteria. Of the 117 videos analyzed, 84.62% were considered useful, while 15.38% contained confusing scientific information. The majority of videos demonstrated high quality (59.82%), followed by videos with intermediate quality (24.78%), while the percentage of low-quality videos is 15.38%. Videos that were uploaded by individuals specializing in medical recovery, or professional organizations scored higher on DISCERN and GQS scores, signaling higher reliability and quality.

Discussions: Most videos on YouTube provided useful information on lumbar disc herniation rehabilitation, supplementing the information acquired during the teaching courses and being able to compensate for the lack of direct human interactivity student-patient in the context of isolation during the Covid pandemic.

Conclusions: Students should be aware of the limitations of YouTube information. The site should consider blocking confusing scientific videos, using validity scales such as modified DISCERN and GQS.

ID566 Gait Rehabilitation and Falls Prevention of Patients with Post-stroke Hemiplegia in Sub-acute and Chronic Stages - Qualitative Analysis of Information Posted on Youtube, as a complementary source of medical education for physiotherapy students in the context of the Covid pandemic

Lidia Johana Ionescu[1], Aurelian Anghelescu[1]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Background: Internet is a fast and accessible way to medical information. Patients with chronic diseases are the ones who most frequently turn to online resources. YouTube is one of the most visited platforms used for sharing health information with over a billion unique views each month.

Objectives: The purpose of this study is the qualitative analysis of the information posted on YouTube, as a complementary source of medical education for physical therapy students in the context of the COVID19 pandemic.

Material and Methods: Searches were performed on YouTube using keywords: "rehabilitation walking after stroke", "stroke fall prevention", "rehabilitation of foot after stroke", "hemiplegia gait recovery", "ACV recuperación de la marcha", "ictus recuper-ación" del miembro inferior", "stroke recovery from marches", "stroke recovery Prévention des chutes". From 110 videos, only 83 were selected, analyzed, and classified. The DISCERN instrument and the Global Quality Scale (GQS) were used to assess reliability and quality.

Results: From the total of 83 videos that met the inclusion criteria, DISCERN scale allowed the separation as:

16 "excellent", 39 as "very good", 18 as "good", 20 video clips were "weak. According to the sources, most of the videos were posted by doctors, physiotherapists, and specialized medical institutions (84.52%), while a small part of the evaluated content was posted by independent vloggers (15.47%).

Discussion: Most of the information posted on YouTube was high quality and can be helpful to the physical therapy student, as a complementary source and supplementing information received in the lecturing courses and partially filling the lack of direct contact, and interpersonal student-patient, during the isolation period during the Covid19 pandemic.

Conclusions: Physiotherapy students should select and approach with caution the information accessed on various media channels. YouTube should use quality and reliability scales like DISCERN or GQS to avoid misleading or poor-quality videos.

ID569 Rehabilitation of the Patients with Paraplegia after Spinal Cord Injury in the Subacute and Chronic Stages - qualitative Analysis of Information Posted on Youtube, as a Complementary Source of Medical Education for the Physical Therapy Student, in the Context of the Covid Pandemic

David Ionuț Tudorache[1], Aurelian Anghelescu[1]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Background: Internet has grown significantly on a global scale, becoming accessible in most fields, including health. YouTube is the primary source for video distribution and a platform that has certain policies that allow the user to have valuable content in various fields. However, the quality of information about paraplegia posted on Youtube is completely unknown.

Objective: The purpose of this study is to evaluate, the reliability, quality of the videos, as well as the way of collecting and interpreting data content.

Material and Methods: A deep search on YouTube included keywords "paraplegia", "therapy", "paraplegic rehabilitation", "walk rehabilitation", and "falls prevention". From a total of 67 screened videos, 31 were thoroughly analyzed, in order to evaluate and fulfill each criterion related to the quality of the scientific content. For qualitative analysis, various scales such as DISCERN and GQS (global and general quality assessment) were used.

Results: 36 films were duplicated and excluded; the remind 31 video clips were integrated into the analysis. Of these, 96.77% (30/31) provided useful information and only one 3.23% (1/31) contained confusing information. Videos published by medical or academic institutions, but also by independent vloggers, had higher DISCERN and GQS scores in terms of reliability and quality.

Discussion: The student in physical therapy can complete the information received in class, despite the obstacles encountered in the case of direct, interpersonal student-patient contact, during the isolation period during the Covid pandemic. However, YouTube can present misinforming aspects, and medical professionals and students should be fully aware of it.

Conclusions: Students must be careful in selecting and approaching the information distributed on the mass media, because these platforms may contain erroneous information within the scientific content related to the branch of medicine, being able to use validating scales such as DISCERN AND GQS.

ID571 Gait Recovery and Falls Prevention in Patients with Parkinson`s Disease in the Stage of Mild and Moderate Disability - Qualitative Analysis of Information Posted on YouTube, as a Complementary Source of Medical Education for Physiotherapy Students in the Context of the Pandemic

Rares Zavoianu[1], Aurelian Anghelescu[1]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Introduction: The most important source of information nowadays is the Internet, which has become accessible in most fields, including health. Millions of users access online platforms in search of answers related to the medical field. Youtube is currently the main platform that allows the distribution of videos.

YouTube has certain policies and search filters that will allow the user to have access to the most appropriate information according to the chosen field. However, the accuracy and quality of information extracted from the YouTube platform about Parkinson's is not fully known.

Objective: This study aims to objectively analyze and evaluate the reliability and quality of videos that refer to Parkinson's disease (PD) rehabilitation.

Materials and methods: YouTube searches were conducted, including the keywords "therapy", "Parkinson", "parkinson's rehabilitation", and "fall prevention in Parkinson". Of the total of 47 videos screened, 20 were thoroughly analyzed and integrated into the analysis. The qualitative analysis and assessment used DISCERN and the global quality (GQS) scales.

Results: Of the 20 videos analyzed, 95% (19/20) provided useful information, and only 5% (1/20) contained confusing information. Videos posted by medical institutions or professional organizations presented higher DISCERN and GQS scores for quality and reliability.

Discussion: This study demonstrated the importance of information from YouTube videos that refer to PD, being able to compensate for the lack of direct, interpersonal student-patient contact during the Covid pandemic. It should be noted that YouTube does not share all information with approved scientific content, so the intervention of medical specialists is necessary in order to correct any misinformation during meetings with patients.

Conclusion: Physiotherapy students must be careful when selecting and approaching information from the mass media, because these platforms may contain erroneous information related to the medical field.

DISCERN and GQS scales are useful to avoid misleading video materials.

ID574 Acute Myocardial Infarction in a 24-year-old man

Cosmina-Elena Jercalau[1,2], Andreea Catana[1,2], Eleonora Dragan[2], Catalina-Liliana Andrei[1,2], Crina Julieta Sinescu[1,2]

[1]Department of Cardiology, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Emergency Clinical Hospital Prof. Dr. Bagdasar Arseni, Bucharest, Romania

Objectives: Few studies have focused on acute ST-elevation myocardial infarction in young patients. Chest pain in young patients is a frequent cause for emergency department visits. The purpose of this case report is to shine some light on a deceptive item: myocardial infarction is not a rare cause of chest pain in young people.

Material and Methods: We report a clinical case of a 24-year-old male smoker presenting in the emergency department with severe 3 hours lasting chest pain radiating to upper back.

We performed a detailed anamnesis, physical examination, laboratory tests, ECG, echocardiography and coronary angiography.

Results: Medical history reveals untreated hypercholesterolemia diagnosed at the age of 16. Additionally, the patient had a strong family history of his father diagnosed with hypercholesterolemia at the age of 30 and who suffered a myocardial infarction at the age of 40. Physical exam was unremarkable. ECG revealed sinus rhythm with diffuse ST elevation. Laboratory results showed dynamic elevated creatin-kinase, creatin-kinase-MB, troponin I and significant hypercholesterolemia.

ECG, elevated cardiac enzymes, and echocardiography showing anterolateral left ventricular and apical septum hypokinesia confirmed ST elevation myocardial infarction.

Coronary angiography revealed occlusion of the second segment of the left anterior descending coronary artery, which was treated with one drug eluting stent. After reviewing Dutch Lipid Clinic Criteria, our patient had a definite diagnosis of Familial hypercholesterolemia.

Conclusion: Young patients presenting chest pain can be misdiagnosed since they do not frequently have classical coronary risk factors. Although rare, acute myocardial infarction should be considered in this category of age. Furthermore, Familial hypercholesterolemia is one of the most common causes of premature myocardial infarction.

ID575 The Impact of COVID-19 on Gastroenterology Department

Delia Negru-Voda[1,2], Ana Stemate[1,2], Teodora Spataru[1,2], Lucian Negreanu[1,2]

[1]Gastroenterology Department, University Emergency Hospital Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objectives: The activity of the Gastroenterology Department in the Emergency University Hospital of Bucharest has temporarily changed, becoming a COVID-19 Department, where we noticed an increased prevalence of liver injuries associated with this disease. We aimed to evaluate clinical and paraclinical characteristics of patients with COVID-19 and to investigate the impact of liver injury on COVID-19 severity.

Methods: We conducted a retrospective observational study. There have been included all the patients older than 18 years, without previously known liver disease, admitted to the Gastroenterology Department with moderate to severe SARS COV2 infection from the period of January 1, 2020 to November 30, 2021. They were followed up to the discharge, death or transfer to other hospitals. We created and analyzed a database from electronic health records, including demographic, clinical and paraclinical data.

Results: From 816 patients, 284 (34,80%) of them presented liver injury (an abnormal value of alanine-transaminase, aspartate-transaminase, alkaline-phosphatase, gamma-glutamyl transpeptidase or total bilirubin more than 2 times over the upper limit on admission). Hepatic impairment at diagnosis was associated with pre-existing metabolic syndrome, pulmonary afflictions or hepatitis B virus infection.

A higher proportion of subjects included in the liver injury group needed ICU admission comparing to the other group (44.84% versus 37.80%, $p<0.05$). Furthermore, the requirement of mechanical ventilation was more increased in the first group (44.84%) whereas in the second one only 38.24% of the patients needed a modality of mechanical ventilation ($p=0.05$).

A logistic regression analysis after the adjustment for sex, age and comorbidities confirm that liver injury on admission is the secondly most important risk factor after the age, for the mortality.

Conclusion: The results of this study are consistent with the hypothesis that hepatic function impairment in patients with COVID-19 represents a negative prognostic factor concerning ICU admission, the requirement of mechanical ventilation and mortality.

ID582 Covid 19 and IBD Patients - a Two Year Experience

Teodora Iulia Spataru[1,2], Ana Stemate[1,2], Delia Negru-Voda[1,2], Lucian Negreanu[1,2]

[1]*Gastroenterology Department, University Emergency Hospital Bucharest, Romania*
[2]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Introduction: It is well known that IBD patients are vulnerable to stress factors and anxiety, so the COVID19 pandemic has added one more layer of concern regarding the evolution of their illness. Due to the highly infectious and pathogenic nature of SARS-COV-2, patients have shown an increase in anxiety and even panic. One way of following the course of these patients was by using the IBD Disk questionnaire to try to apreciate how their quality of life has changed.

Methods: A prospective review was performed between April 1, 2020 and March 1, 2022 on actively managed IBD patients using the IBD Disk questionnaire, as we tried to understand how their quality of life has changed throughout the pandemic. We have asked the patients to answer the IBD Disk questionnaire within the first month of the pandemic, then after 6 months, 1 year and finally after two years (march 2022).

Results: 32 of current 146 active chronic care patients were included, with ages between 20 and 70 and 59% males. 72% have Crohn's disease, while 28% have ulcerative colitis. At the begining of the pandemic most of our patients were having trouble sleeping – 95,8% , and also have experience an increase in their anxiety- 87,5%. After 6 months of SARSCO2 pandemic, 100% of the patients were accusing lack of energy, and due to all restrictions 93,7% have had trouble with their interpersonal interactions. After 1 year when we gave them the IBD Disk questionnaire , the situation appeared to change and their reports regarding the quality of life have started to slightly improve: 37,5% were experiencing anxiety, 65,6% were having trouble sleeping, 78% were experiencing fatigue, but still 100% have reported abdominal pain. After two years, when we asked the the same questions again, our patients seemed to respond quite similarly : 34,3% have reported anxiety, 62,5% said they were having difficulty sleeping, and the abdominal pain remained a constant issue for all the patients. Within the first year , 33,3% of our patients have had flare-ups, but our latest results have shown a decrease in their number- 9,3% have had flare-ups over the last year. There were 0 hospitalizations required for COVID management.

Conclusion: The IBD Disk questionnaire proved to be a usefull tool to asses the clinical and psychological evolution of our patients, especially durind this period of time with the SARSCOV2 pandemic, when hospital access has been limited. Although our study included just a few patients, it seems to be worth doing more studies using this questionnaire, in order to better and more easily evaluate our patients.

ID 583 Detection of Colonic Adenomas Using SFI-spectral Focused Imaging in an Opportunistic Setting

Tircol Simona[1], Pahomeanu Mihai[1], Ghidersa Andreea[1], Sadagurschi Roxana[1], Babiuc Ruxandra[1], Stemate Ana[1,2], Negreanu Lucian[1,2]

[1]*Gastroenterology Department, University Emergency Hospital Bucharest, Romania*
[2]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Aim: Colorectal cancer remains a major health issue and colonoscopy is the main method proved to decrease incidence and mortality. Different quality measure items for screening colonoscopy were introduced over time. A higher adenoma detection rate (ADR) has been shown to be related to a lower incidence and mortality of colorectal cancer. We used spectral focused imaging SFI for assessing the detection and miss of various featured adenomas as compared with white light imaging (WLI). The adenomas were characterized using the VALID classification that we firstly introduced in 2019.

Methods: We conducted a prospective, randomized, tandem trial in opportunistic screening patients using the 4 LED 550 HD series endoscopy system form Sonoscape (Shenzen,China) The participants were randomly assigned to two groups: first observation by SFI, then second observation by WLI (group A); or both observations by WLI (B group). Examinations were conducted by 3 junior and 3 senior endoscopists. The primary outcome was to compare the ADR during the first observation. Secondary outcomes included evaluation of adenoma miss rate (AMR) and visibility score.

Results: A total of eighty patients were randomized, 70 of whom were included in the final analysis. The ADR was 71% and 65.2% in the SFI and WLI groups, respectively, with no significant statistical difference.

However, SFI improved the average ADR in low-detectors compared to high-detectors (73.0% vs 51%; $P < 0.001$). The adenoma miss rate AMR was 20.6% in the SFI group, which was significantly lower than that in the WLI group (32%) ($P < 0.001$). The AMR in the SFI group was significantly lower, especially for diminutive adenomas less than 10 mm in diameter (24% vs 35.1%; $P < 0.001$) and non-polypoid lesions (26% vs 38%; $P < 0.001$) as compared to the WLI group.

Conclusion: Although both methods provided a similar ADR, SFI had a lower AMR than WLI. Further studies are necessary to validate these findings especially in real life screening colonoscopy conditions.

ID584 Digital Chromoendoscopy Using SFI in Assessment of Mucosal Healing and Risk of Relapse in Ulcerative Colitis

Sadagurschi Roxana[1], Negreanu Ana[1], Ghidersa Andrea[1], Babiuc Ruxandra[1], Negreanu Lucian[1,2]

[1]*Gastroenterology Department, University Emergency Hospital Bucharest, Romania*
[2]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Background and aim: The Mayo Endoscopic Subscore (MES) is the most used score to assess endoscopic mucosal healing in patients with ulcerative colitis. Although mucosal healing is defined by MES 0, relapse of ulcerative colitis is often observed hence the discussion of regarding at histologic healing as a target.

Over a 6-month period, this study investigated the efficacy of SFI (spectral focused imaging) in predicting the long-term prognosis and risk of relapse of ulcerative colitis patients diagnosed with MES 0.

Methods: Overall, 20 ulcerative colitis patients in remission with biologic treatment, diagnosed with MES 0 using white light endoscopy, were retrospectively analyzed after their colonoscopy(performed 6-12 months before) for prediction of relapse.

Using the 4 LED HD-550 endoscopy system (Sonoscape Corp, China) endoscopic colonic images were assessed with spectral focus imaging and the colitis endoscopic index of severity. Endoscopic SFI images were separated into three subgroups (A, no redness; B, redness with visible vessels; and C, redness without visible vessels). The Geboes score was used to evaluate histology; active mucosa was defined as GS > 2B.1.

Results: Spectral Focused imaging permitted to classify patients with MES 0, in two different classes. The group A with no redness on initial evaluation did not relapse, and the non-relapse rate was significantly higher (P = 0.016) than that in the other 2 groups. No difference in relapse rates was observed between patients with a colitis endoscopic index of severity of 0 and 1 (P = 0.622). There was no statistical difference between the composition of SFI-A group and the relapse rate between active and inactive histologic changes diagnosed by Geboes score, a finding which is rather challenging but seen also in other studies.

Conclusions: This methodology can be used to evaluate mucosal healing and predict long-term outcomes in ulcerative colitis patients and can be easily employed; future studies are necessary to automate this process and to analyze the biomarkers correlations.

ID585 Doppler Ultrasound and Intima Media Thickness Evaluation in Ulcerative Colitis: More than an Adenomatosis Predictor, a Tool for Everyday Monitoring

Negreanu Ana[1], Stemate Ana[1,2], Negreanu Lucian[1,2]

[1]*Gastroenterology Department, University Emergency Hospital Bucharest, Romania*
[2]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Introduction: In inflammatory bowel disease, inflammation may play a role in the progression of atheromatosis. Endothelial dysfunction is mediated by pro-inflammatory cytokines but also by an increased level of CRP which is involved in the expression of adhesion molecules and atheroma plaque rupture.

Aim: We decided to use a well-established method (Doppler ultrasound with mean intimate index measurement) to detect early atheromatosis in order to see if there is an increased incidence of endothelial lesions in patients with RCUH treated with biological or conventional therapy and try to validate this method as a tool in proactive monitoring of patients.

Material and methods: We prospectively analyzed 25 patients with RCUH with a mean age of 40 years, 16 with biological treatment. The student t test, the Mann Whitney U test and the ANOVA test were used to compare continuous variables.

Results: A discriminant analysis was performed with the presence of atheroma plaque as a dependent variable and several predictor variables, such as age, triglycerides, cholesterol of patients with ulcerative colitis. 13 valid cases were analyzed. Univariate ANOVA analyzes revealed that the presence or absence of atheroma plaque differs in the variables predicting the age, INR and ecoIMT of patients with ulcerative colitis (in the age of patients (F = 8.511, degrees of freedom = 11, p = 0.014) Patients 'INR (F = 50,437, degrees of freedom = 11, p = 0.001) and Patients' ecoIMT (F = 7,398, degrees of freedom = 11, p = 0.020) In another analysis of discriminatory function s -introduced the predictor variables specific to measuring the evolution of ulcerative colitis, respectively Mayo and Mayo E (age (F = 0.8511, degrees of freedom = 11, p = 0.014), INR (F = 50.437, degrees of freedom = 11, p = 0.001), ecoIMT (F = 7.398, df = 11, p = 0.020) and Mayo (F = 14.885, degrees of freedom = 11, p = 0.003).

Conclusions: Age, endoscopic activity, and INR were correlated with predictive ultrasound changes for atheromatosis. Strengths are the prospective nature and statistical analysis of patients (part of a group of 61 patients and 20 controls) and weaknesses that most patients were in remission and treated with biologicals, which could create bias in the sense of reducing the atherosclerotic risk directly correlated with active inflammation.

ID 587 Spectral Focused Imaging in Diagnosing Intestinal Metaplasia and H pylori Infection - a Pilot Study

Ghidersa Andrea[1], Sadagurschi Roxana[1], Babiuc Ruxandra[1], Pahomeanu Mihai[1], Lucian Negreanu[1,2]

[1]*Gastroenterology Department, University Emergency Hospital Bucharest, Romania*
[2]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Objective: Digital chromoendoscopy is widely available with the new generation of endoscopes; a novel image-enhanced endoscopy- spectral focused imaging SFI(Sonoscape corp, China) can be used to recognize differences in mucosal color. We investigated whether SFI could improve the diagnostic accuracy of gastritis and gastric intestinal metaplasia.

Materials and methods: Upper endoscopy videos from 100 patients were analyzed; endoscopy was performed using white light imaging (WLI) and SFI.

Images were assessed by two expert and two junior endoscopists which reviewed the videos for endoscopic diagnosis of atrophic gastritis, metaplastic gastritis, nodular gastritis and H. pylori infection. Tissue biopsies with histologic examination and with rapid urease tests for H. pylori infection status and intestinal metaplasia detection were performed according to Sydney classification.

Results: Kappa values for the inter-observer variability among the four endoscopists were fair to moderate under WLI and fair to good under SFI; no difference were observed between the senior and junior endoscopists.

Sensitivity, specificity, positive predictive value and negative predictive value for diagnosing H. pylori infection using WLI were 29.4%, 91.3%, 83.4% and 54.%, respectively, while those for SFI were 58%, 92.2%, 88 % and 65 %, respectively. The accuracy and sensitivity of SFI for diagnosing H. pylori infection were significantly higher than those of WLI ($p < .001$ for both). SFI better diagnosed the extent of intestinal metaplasia but we fail to demonstrate a superiority in detection over WLI.

Conclusions: SFI has better diagnostic accuracy for H. pylori infection status than WLI.

Future studies are necessary for the evaluation of this method in detection of intestinal metaplasia and its extent.

ID 588 Capsule Endoscopy In Crohn's Disease Patients – A Friendly Detective

Ana Stemate[1,2], Teodora Iulia Spătaru[1,2], Delia Negru-Vodă[1,2], Lucian Negreanu[1,2]

[1]*Gastroenterology Department, University Emergency Hospital Bucharest, Romania*
[2]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Introduction: Crohn's disease (CD) is a chronic, inflammatory bowel disease that can affect any segment of the digestive tract. The capsule endoscopy (VCE) is a non-invasive method, that plays an important role in both diagnosing and managing patients with CD, especially if there is affected only the small bowell mucosa.

Methods: A retrospective study was done, including patients with active CD, from University Emergency Hospital of Bucharest, between 2010 and 2021.

Patients had a hydric diet the day before the procedure and PEG 2l before and 1l, 1 hour after ingestion of VCE, to optimize the visualization of the last portion of the small bowell. The SB2, SB3 and COL2 were used, and the data was processed using Rapid 7+8.

To reduce the risk of VCE retention, all patients were investigated by enteroCT, prior to VCE investigation.

Results: We included 62 patients with CD who were evaluated using the VCE. They were between 23 and 68 years old, 67% being men.

The type, site and number of lesions suggestive of CD, identified by VCE, was assessed. 8(12,9%) patients had insignificant, 11(17,74%) possible significant and most patients, had significant lesions (69,36% vs 17,74% vs 12,90%,$p<0,001$).

According to the Montreal classification, most patients, had ileal disease, being followed by those with jejunal disease (48,39%vs 0 vs 19,35%vs 32,26%,$p<0.05$). In L4 group, the escalation of the therapy was performed in19 out of 20 patients, secondary to the VCE, in most of them the anti TNF therapy being initiated. In two patients, jejunal stenosis was detected and capsule retention occurred, requiring surgery.

Conclusion: In the patients with CD, jejunal involvement is associated with an increased risk of complications. Because of that, the capsule endoscopy, which is the most sensitive method for diagnosing jejunal lesions, inaccessible by conventional endoscopy, represents a friendly detective which allows the assessment of subtle lesions at this level, proving its value in classifying the disease and influencing the prognosis by approaching to an aggressive therapeutic strategy in this group, secondary to VCE investigation.

ID596 Epidemiology of Lyme Disease in Romania Between 2010-2021

Mihaela Goian[1], Daniela Pitigoi[1]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Objective: Lyme disease (LD) is a tick-borne disease caused by the spirochaete Borrelia burgdorferi. The aim of our study was to describe the epidemiological characteristics of patients diagnosed with LD between 2010 and 2021 in Romania.

Methods: We performed a descriptive analysis based on the available surveillance data reported by the National Centre for Surveillance and Control of Communicable Diseases (CNSCBT) in 2010-2021.

LD is mandatory and nominally reported, according to the surveillance methodology developed by CNSCBT and introduced at national level since 2010. Cases are reported and confirmed according to a case definition that includes clinical, epidemiological and laboratory criteria.

Results. Between 2010 and 202, 10 040 suspected cases were reported and 4827 (48%) were real cases (confirmed + probable) with LD.

The average incidence rate of the disease was 1.97 per 100 000 inhabitants, with a peak in 2012 (4.2‰).

During COVID–19 pandemic, incidence of LD in Romania decreased compared to pre-pandemic period (1.2‰ during the pandemic vs. 2.1‰ pre-pandemic).

Average incidence was higher in women (2.2‰ vs. 1.7‰ in male) and in urban areas (2.3‰ vs. 1.7‰ in rural areas).

Sibiu county had the highest average incidence of LD (24.1‰).

Most patients affected by LD were diagnosed in the first stage of disease (3367 cases, 69.8%).

Tick bite was mentioned in 74.3% cases.

No deaths were reported.

Conclusions: LD should be considered in patients with characteristic symptoms after documented tick bite. Population should be informed regarding the preventive measures when working or relaxing in vegetation abundant areas throughout the country, especially in high-risk regions like the center of the country and about the correct management of tick bite.

ID597 NT proBNP is a Decision Factor in Preventing Heart Failure at Pacients with Ischemic Heart Disease

Irina Cuciureanu[1], Catalina Andrei[1], Andreea Lacraru[1], Crina Sinescu[1]

[1]*"Bagdasar-Arseni" Emergency Hospital, Plastic and Reconstructive Department, Bucharest, Romania*

Background: To prove the importance of NT-proBNP for preventing heart failure at patients with ischemic heart disease.

Materials and Methods: We included 136 patients who were presented at our hospital with ischemic heart disease, during three years. We excluded patients who are already diagnosed with heart failure or who had current symptoms of heart failure. We randomized patients into 2 equal groups: a control group and an intervention group. NTproBNP value was determined for all patients. In the intervention group patients were treated according to the NTproBNP. Patients with NTproBNP <125pg/dl received standard treatment for their symptoms. Patients with NTproBNP>125pg/dl were the ones on which we intervened to prevent heart failure. They were investigated by cardiac ultrasound and other tests and they received specific treatment. Patients in the control group received standard treatment regardless of the NTproBNP value.

Results: After three years, the end points were: diagnosis of heart failure, left ventricular systolic dysfunction and the rate of hospitalizations for cardiovascular pathology. After three years in the control group were sixteen (24.3%) patients who developed heart failure compared to eleven (15.7%) patients in the intervention group. Twenty-eight (42.4%) patients were diagnosed with left ventricular systolic dysfunction, compared to twenty (28.6%) in the intervention group. Also, and rate of admissions for cardiovascular pathology was higher in the control group twenty-nine (43.9%) versus seventeen (24.3%) in the intervention group.

Conclusions: Patients in the intervention group, in which the value of NTproBNP was used in choosing therapeutic management, had lower rate of incidence of heart failure or cardiovascular events than patients in the control group. The NTproBNP value in ichemic patients without heart failure can detect patients at risk of developing heart failure. And more, medical intervention guided by NTproBNP can prevent or delay heart failure at patients with ischemic heart disease.

ID598 Toxocariasis, an Undediagnosed Pathology?

Corina Violeta Cristea[1], Adela Vekony[1], Mircea Ioan Popa[1], Gabriela Loredana Popa[1]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Introduction: Toxocariasis is a relatively common parasitic infection in our country, the active disease sometimes posing a challenge to positive diagnose. It is caused by Toxocara spp. More frequent are Toxocara canis and Toxocara cati, found in their main hosts dogs, and respectively cats; humans act as an accidental host in the parasitic cycle. The focus of this study is to evaluate the clinical, epidemiological, and laboratory elements of diagnosed Toxocariasis cases.

Materials and Methods: The cohort included 30 cases of Toxocariasis over a period of 3 years, diagnosed and treated in the Infectious Diseases Ward at Colentina Clinical Hospital. We analysed clinical, imagistic, laboratory, and treatment data.

Results: The investigated patients were aged between 2 and 74, with most of them pertaining to the 55-59 age group. The greatest contamination risk was found in patients who had previously been exposed to dogs or cats, as well as contaminated soil. An important number of patients from the studied lot suffered from other parasitic diseases, such as: Toxoplasmosis (13 cases), Giardiasis (5 cases), Hydatidosis (3 cases), Oxyurasis (1 case).

At the clinical examination, the most frequently observed signs and symptoms were asthenia and gastrointestinal problems (12 cases), hepatomegaly (3 cases), and splenomegaly (2 cases). In 23 patients, IgE levels were raised, and in 20 the eosinophilic blood count numbers were over the normal value; only in 19 patients ELISA tests were positive. In the case of 26 patients, three cures of antiparasitic treatment were necessary, and for 2 of them as much as 7 cures were employed.

Conclusions: Our clinical study has highlighted the full spectrum of clinical manifestations, including the clinically muted form (covered Toxocariasis) in which hypereosinophilia prompted the medical addressability. It is imperative that correct medical information regarding Toxocariasis be disseminated, and that interdisciplinary collaboration be encouraged for devising effective prevention and control measures.

ID600 Clinical Relevance of DQA1 and DQA1 Gene Polymorphisms in Romanian Patients with Celiac Disease their First Degree Relatives and Healthy Persons

Carmen Preda[1,3], Ion Maruntelu[1,2], Irina Sandra[3], Doina Istratescu[3], Mircea Diculescu[1,3], Ileana Constantinescu[1,2]

[1]*"Carol Davila" University of Medicine and Pharmacy Bucharest, Romania*

[2]*Centre of Immunogenetics and Virology, Clinic Fundeni Institute Bucharest, Romania*

[3]*Gastroenterology and Hepatology - Fundeni Clinical Institute Bucharest, Romania*

Introduction: Celiac disease is characterized by an inappropriate T-cell-mediated response to gluten in small bowel in genetically predisposed individuals, carriers of the DQ2 and/or DQ8 haplotypes of the human leukocyte antigen. The aim of our study was to asses HLA typing in adult patients with celiac disease, in their first degree relatives and in a healthy control group.

Methods: We conducted a prospective observational study on three cohorts: 117 patients diagnosed with celiac disease, 41 first-degree relatives of celiac patients and 57 asymptomatic healthy volunteers. Low resolution HLA typing for DQ alleles was performed in all study subjects with DNA extracted from peripheral blood, using SSP HLA-DQB1 kit (Innotrain Diagnostik GmbH, Germany). Next Generation Sequencing (NGS) was used only in 18 patients for typing confirmation of DQB1 and DQA1 loci and whole gene sequencing.

Results: Prevalence of HLA-DQ2 was significantly higher in the CD group compared to the healthy subjects group (95.6% vs 29.8%, $p < 0.001$), with no statistically significant differences in HLA-DQ8 and combined HLA-DQ2/DQ8 prevalences.Several HLA DQA1 and DQB1 alleles (HLA-DQA1* 05:01, HLA-DQB1*02:01, HLA-DQB1*02:02) and haplotypes (DQA1*02:01-DQB1*02:02, DQA1*05:01-DQB1 *02:01) were strongly associated with celiac disease in our group: OR 4.28, 4.28, 4.67 and 5.43 and 4.28 respectively. Predominantly, patients presented with typical symptoms and iron deficiency anemia. 95.5% of them had histological Marsh type modifications ≥3a. A relatively poor response to gluten-free diet was observed and 9.4% developed complications (refractory celiac disease, enteropathy-associated T cell lymphoma, intestinal adenocarcinoma), with a death rate of 6.8%. 23% associated other autoimmune diseases. Screening adherence for 1st degree relatives was very low: only 16%. Familial screening diagnosed 4 cases of asymptomatic celiac disease. 32 relatives (78%) had HLA-DQ2 haplotype, 5 carried HLA-DQ8, 4 didn't carry any risk haplotype.

Conclusions: This study demonstrated a higher prevalence of the HLA-DQ2 genotype in patients with celiac disease compared to the healthy population but not of HLA-DQ8 or combined HLA-DQ2/DQ8. Alleles HLA-DQA1* 05:01, HLA-DQB1*02:01, HLA-DQB1*02:02 and haplotypes (DQA1*02:01-DQB1*02:02,DQA-1*05:01-DQB1*02:01) were strongly associated with celiac disease in our cohort.

ID603 Unhealthy Lifestyle and the Prognosis of Patients with Heart Failure

Andreea Lacraru[1], Catalina Andrei[1], Nicoleta Avram[1], Eleonora Dragan[1], Crina Sinescu[1]

[1]*Department of Cardiology, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Purpose: In this study we analyzed the correlation between lifestyle and the prognosis of patients with heart failure in the short and medium term. We aimed to identify whether persistent smoking and hypersodium diet can lead to a higher probability of readmission of patients with heart failure (HF) during the vulnerable period or to an increased risk of in-hospital mortality and one year mortality. The vulnerable period for patients with heart failure refers to the first 90 days after discharge.

Material and methods: This was a retrospective study that included 500 patients with heart failure, who were admitted in the Cardiology Clinic of the Emergency Clinical Hospital "Bagdasar Arseni" in Bucharest, between October 2018 and October 2019 and enrolled 500 patients with heart failure. After applying the inclusion and exclusion criteria, 198 patients remained eligible for inclusion in this study. Demographic data as well as those related to the presence of complications during hospitalization and in-hospital mortality were collected from the observation sheet and from the database of the "Bagdasar Arseni" hospital. Data on readmission in the first 90 days after the reference discharge and one year mortality were assessed by telephone and using the Hipocrate software. All data obtained were entered into the Microsoft Excel database and were statistically processed using the Python program.

Results: After analyzing the data, we found that an unhealthy lifestyle increase the probability of readmission by 12 % and the risk of in-hospital mortality by 17 %. Also, we observed that men have a more unhealthy lifestyle than women (p=0.000) and younger patients tends to have an unhealthy lifestyle compared to the elderly (p-value = 0.000). The same trends was observed in professionally active people compared to patients without a professional occupation (p = 0.02). No statistically significant differences were observed in terms of the unhealthy lifestyle of people from urban or rural areas.

Conclusions: The present study highlights the fact that an unhealthy lifestyle increase the mortality rate and readmissions in patients with heart failure. From the analyzed data, our study is the first study that measured the cumulative impact of modifiable risk factors related to lifestyle on readmission in the vulnerable period. We believe that these results could be the basis of a future study that would include a larger number of a patients and more modifiable factors.

ID614 Variceal Band Ligation Versus Beta Blockers For Primary Prvention Of Variceal Bleeding

Marilena Stoian[1,2]

[1]*Department of Cardiology, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

[2]*Clinical Hospital Dr. Ion Cantacuzino, Bucharest, Romania*

Background: Variceal band ligation (VBL) can reduce the rate of the first variceal bleed by 45-52% compared with beta-blockers (BB).An updated meta-analysis was performed incorporating 9 peer-reviewed randomized controlled trials.

Methods: Relative risk (RR) using a fixed effects model was utilized. Sensitivity analysis using a random effects model was performed to assess consistency of results.

Results: 734 patients were studied (356,VBL;378,BB).The pooled RR significantly favored VBL for the first variceal bleed (0.61;95% CI,0.44-0.84) with the NNT of 11 (95% CI , 7-33), and for adverse events with treatment withdrawal(0.20;95%CI, 0.10-0.39) with the NNT of 9 (95% CI, 7-33). There was a trend towards reduced bleeding deaths with VBL (RR, 0.65; 95%ci, 0.35-1.18) There was no evidence of differences in overall mortality. There was no significant heterogeneity or publication bias, and outcomes were robust following sensitivity analysis.

Conclusions: VBL was superior to BB for preventing the first variceal bleed and resulted in fever adverse events.VBL has a role in patients unlike to comply with drug therapy, or unable to tolerate /bleed on BB therapy.

ID397 Uterine Adenomyosis Ultrasound Criteria Versus Histopathologic Diagnosis

Alexandra Matei[1], George Alexandru Rosu[1], Ina Banacu[2], Mihai Cornel Dimitriu[1], Cringu Ionescu[1]

[1]Department of Obstetrics and Gynecology, "Sf. Pantelimon" Emergency Hospital, Bucharest, Romania
[2]Department of Obstetrics and Gynecology, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objective: To identify ultrasound prediction accuracy in diagnosing adenomyosis in patients with histopathologic (HP) diagnosis of certainty.

Method: In 2018 we have performed a retrospective observational study at "Sf. Pantelimon" Emergency Hospital in Bucharest, Romania, including all patients admited during that year for histerectomy, associating HP diagnosis of adenomiosis. Data regarding clinical symptoms, ultrasound examination and specific surgical intervention were collected from the HP registries, patient electronic chart and ultrasound machines.

Results: There were 71 patients with retrospective HP diagnosis of adenomyosis. Main reason for admission to the hospital were pelvic pain and metrorrhagia; most patients (31 women) were in their fertile years and had urban residency. A proportion of 86% of women had focal adenomyosis. There were no significant differences in the age of women with focal versus diffuse adenomyosis: 47.7 years versus 45.5 years of age. Women with diffuse adenomyosis associated significantly lower values of haemoglobin compared to those with focal disease. About 66.1% of patients had ultrasound examination at admission; of those without ultrasound exam, 87.5% were further HP diagnosed with focal adenomyosis and 12.5% with diffuse adenomyosis. Specific adenomyosis ultrasound criteria were described for 4% of patients, while for 34% of them suspicion of myoma was raised, most often in the case of focal adenomyosis. Considering HP certainty diagnosis and the ultrasound reported criteria: most often irregular junctional zone and subendometrial lines and buds, there was a calculated 8.5% ultrasound suspicion rate of adenomyosis. Most often performed surgical procedure was total hysterectomy.

Conclusion: The prevalence of adenomyosis is likely underestimated because of the lack of standardized criteria in both imaging and histological confirmation. Improved imaging recognition of adenomyosis could facilitate better understanding of the natural progression of the disease and advance its clinical treatment options outside of surgery.

ID419 Predictors for Retroperitoneal Tumor Locoregional Recurrences

Angela Madalina Lazar[1,2], Claudiu Daha[1,3], Bogdan Mastalier[1,2], Eugen Bratucu[1,3]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]General Surgery Clinic, Colentina Clinical Hospital, Bucharest, Romania
[3]First Surgical Clinic, Bucharest Institute of Oncology "Prof. Dr. Al. Trestioreanu", Romania

Retroperitoneal tumors, both benign and malignant are characterized by high locoregional recurrence rates. The repeated recurrences after multiple re-operations associate a high degree of surgical complexity, ultimately becoming inoperable and leading to the death of the patients. The current study aimed to identify predictors for the development of postoperative retroperitoneal tumor recurrences and to evaluate the impact of the recurrence on the long-term patient prognostic.

Patients and methods: A retrospective study was conducted on a group of 140 patients operated-on for primary and recurrent retroperitoneal tumors over a period of 16 years. Patient-, tumor-, therapeutic-related factors were included into an extensive statistical analysis in order to identify predictors for the development of tumor recurrences after radical surgery.

Results: 39% of the operated-on patients developed one or multiple locoregional tumor recurrences. Postoperative complications and certain histopathologic subtypes were the most powerful predictor for the development of locoregional recurrences after radical surgery. Interestingly, retroperitoneal tumor recurrences were more frequently recorded in patients with longer overall survival. The development of postoperative tumor recurrences did not prove to be a negative prognostic factor in the statistical analysis, as the tumor recurrences were precociously diagnosed and treated.

Conclusions: Retroperitoneal tumors are recognized for their high locoregional recurrence rates - main cause of patient death after radical surgery. Nonetheless, our study highlighted that a meticulous, long-term follow-up of the operated-on patients with precocious diagnosis and treatment of the tumor recurrence is essential in order to increase the overall survival of the patients.

ID420 Retroperitoneal Tumor Growth Patterns and their Prognostic Significance

Angela Madalina Lazar[1,2], Claudiu Daha[1,3], Bogdan Mastalier[1,2], Eugen Bratucu[1,3]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*General Surgery Clinic, Colentina Clinical Hospital, Bucharest, Romania*
[3]*First Surgical Clinic, Bucharest Institute of Oncology "Prof. Dr. Al. Trestioreanu", Romania*

Retroperitoneal tumors are aggressive neoplasias that usually exhibit a silent growth pattern until reaching important dimensions when they are finally diagnosed. However, at such a tumor stage, the chance of achieving radical resection is significantly decreased as the tumor has already involved vital structures. The aim of the present study was to evaluate the significance of various retroperitoneal tumor growth patterns for the operability and patient postoperative prognostic.

Patients and methods: We conducted a retrospective study on a group of 140 patients with retroperitoneal tumors treated in the Surgical Clinic over a period of 16 years. Data from the patient records, imagistic descriptions, histopathologic and intraoperative findings were reviewed to identify various tumor growth patterns. We evaluated the significance of the tumor growth pattern for the surgical operability and overall patient prognostic.

Results: Two opposite growth patterns were identified for the retroperitoneal tumors: an insidious, slow development and a fast, more aggressive profile. Tumor dimension per se was not significant for the surgical operability and patient survival. However, the fast growing tumors significantly associated a worse prognostic, involved important structures more frequently and had higher postoperative recurrence rates.

Conclusions: The frequently outstanding dimensions of the retroperitoneal tumors should not be considered a limitative factor for the selection of the operable patients and achievement of radical surgery. Instead, knowledge on the tumor growth pattern is essential, as fast growing tumors associate increased surgical complexity, often require adjuvant therapies and an attentive follow-up to detect locoregional recurrences.

ID421 Is There a Significance for the Localization of the Retroperitoneal Tumors?

Angela Madalina Lazar[1,2], Claudiu Daha[1,3], Bogdan Mastalier[1,2], Eugen Bratucu[1,3]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*General Surgery Clinic, Colentina Clinical Hospital, Bucharest, Romania*
[3]*First Surgical Clinic, Bucharest Institute of Oncology "Prof. Dr. Al. Trestioreanu", Romania*

Retroperitoneal tumors are aggressive neoplasias that associate a poor prognosis, even after radical surgery. Recently, more and more authors promote a compartment surgery and report a difference of prognosis between left-, median- and right-sided retroperitoneal tumors. The aim of this study was to evaluate whether the localization of the retroperitoneal tumor has significance for the prognostic of the patient.

Patients and methods: We performed a retrospective study on a group of 140 patients with retroperitoneal tumors operated-on in the Surgical Clinic over a period of 16 years. Preoperative clinical and imaging data, intraoperative and histopathologic descriptions were analyzed to investigate whether tumor localization is of statistical significance for the prognostic of the patients.

Results: The majority of the retroperitoneal tumors were medially-located (46.4%) or left-sided (33.9%). Radical surgery was more frequently achieved in the case of left-sided tumors, although there is no statistically significant association between tumor-localization and the radicalness of the operation. At the same time, there was no significant association between the localization of the retroperitoneal tumors and the overall survival of the patients. The dimension of the tumors has no significance for the survival of the patients.

Conclusions: Although some authors have found that a left-, median or right-sided localization of the retroperitoneal tumor associates a differentiated prognostic, our study did not support such a finding. Therefore, it is important to acknowledge that the most important positive prognostic factor for the retroperitoneal tumor patients is the achievement of a radical surgery and not its dimension or localization.

ID422 Adjuvant or Neoadjuvant Therapies for the Retroperitoneal Tumor Patients?

Angela Madalina Lazar[1,2], Claudiu Daha[1,3], Bogdan Mastalier[1,2], Eugen Bratucu[1,3]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*General Surgery Clinic, Colentina Clinical Hospital, Bucharest, Romania*
[3]*First Surgical Clinic, Bucharest Institute of Oncology "Prof. Dr. Al. Trestioreanu", Romania*

More than 70 histopathologic types of retroperitoneal tumors have been already described, the most frequent being liposarcomas, leiomyosarcomas and undifferentiated pleomorphic sarcomas. Despite such an important heterogeneity, the only recognized efficient treatment for retroperitoneal tumors is radical surgery. However, some authors consider that neoadjuvant radiotherapy could significantly increase the surgical radicalness and survival of the patients. In the current study we aimed to analyze whether adjuvant/neoadjuvant therapies are beneficial for the retroperitoneal tumor patients prognostic.

Patients and methods: We conducted a retrospective study on a group of 140 patients, operated-on for primary and secondary retroperitoneal tumors along a period of 16 years. Multiple patient-, tumor-, treatment-related factors were included into the statistical analysis in order to evaluate whether adjuvant/neoadjuvant therapies can be significantly useful for the prognostic of the patients.

Results: 41.1% of the operated patients received neoadjuvant or adjuvant radio-, chemo- or combined radio- chemotherapy. Among these, 84.1% of the patients received adjuvant regimens, more frequently chemotherapy or combined radio-chemotherapy. There was no significant association between the delivery of adjuvant/neoadjuvant therapies and the achievement of a radical surgery. However, combined adjuvant chemo-radiotherapy significantly increased the overall survival of the radically-operated patients.

Conclusions: Our study supports that adjuvant radio-chemotherapy is beneficial for the retroperitoneal tumor patients, increasing their overall survival. However, as more studies are required in order to reach a consensus on the usefulness of such therapies, meanwhile, all efforts should be directed towards achieving a radical surgery, which remains the mainstay treatment for this complex pathology.

ID429 The Risk of Obstetrical Hemorrhage in Placenta Praevia Associated with Coronavirus Infection Antepartum or Intrapartum

Irina Pacu[1,2], Nikolaos Zygouropoulos[2], Alina Elena Cristea[2], Cristina Zaharia[2], George-Alexandru Rosu[1,2], Alexandra Matei[1,2], Liana-Tina Bodei[1,3], Adrian Neacsu[1,3], Cringu Antoniu Ionescu[1,2]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*"St. Pantelimon" Emergency Clinical Hospital, Bucharest, Romania*
[3]*Bucur Maternity "Saint Ioan" Clinical Hospital, Bucharest, Romania*

We embarked on an effort to evaluate the severity of obstetrical bleeding in the third trimester associated with COVID infection in placenta praevia and accreta.

Objective: We conducted a retrospective study whose objective is to compare the risk of obstetrical bleeding in the case of placenta praevia associated with SARS-COV-2 infection with the risk of obstetrical bleeding related to the placenta praevia unrelated to the SARS-COV-2 infection.

Materials and Methods: Patients presenting with placenta praevia prior to labour were classified in three groups: Group A (control) no infection throughout their pregnancy nor active at delivery, Group B confirmed infection during the 1st trimester when placentation takes place, Group C confirmed infection at the time of delivery. Further, infected patients were stratified according to severity of signs and symptoms. The severity of obstetrical hemorrhage at birth was assessed quantitatively as well as qualitatively. In addition, all placentas were analysed macroscopic and histologically to identify similarities.

Results: Prematurity and pregnancy induced hypertension appears significantly related to SARS-COV-2 infection during the third trimester. Placenta accreta risk increases significantly with infection during the 1st trimester. We do not identify statistically significant differences in the severity of hemorrhage associated with childbirth in cases with placenta praevia between groups A and C, but an increased obstetrical bleeding mainly due to emergency hemostatic hysterectomy in group B driven by placenta accreta Obstetrical hemorrhage at birth in the case of coexistence of the infection was found not to correlate with the severity of the viral disease.

Conclusion: In conclusion, the study finds an increased incidence of placenta accreta associated with placenta praevia in cases where the viral infection occurred in the first trimester of pregnancy, associated with an increased incidence of hemostasis hysterectomies in these patients.

ID431 Negative Pressure Wound Therapy - an Alternative Treatment for Pediatric Burns

Doina Iulia Nacea[2], Raluca Tatar[1,2], Dan Mircea Enescu[1,2]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Emergency Hospital for Children Grigore Alexandrescu, Bucharest, Romania*

Objective: Burn wounds are common, complex and evolving injuries, with both local and systemic consequences. According to the 2016 ISBI Practice Guidelines, there is still no ideal dressing for burn wounds. Negative pressure wound therapy (NPWT) is a dressing method that has been widely used and has become a standard therapy in several cases of surgical wounds. It has the properties of an "ideal" burn dressing (non-adhesion, fewer dressing changes, absorbency, antimicrobial activity) and it also reduces local edema, increases dermal perfusion rate, removes bacteria and necrotic tissue from the wound bed, induce endothelial proliferation and neoangiogenesis and promotes granulation.

Material and method: For this study were selected the cases admitted as inpatients with the diagnosis of burns, aged between 0-18 years, regardless of the etiology and location of the burn, whose therapeutic protocol included NPWT.

Results: After analyzing patients' charts, 4 cases were selected. The patient age ranged between 3 and 6 years old. The burns etiology for this group was scald. The surface varied from 10% to 50% TBSA, with an average of 23% TBSA. Every patient underwent wound debridement followed by installation of NPWT at the place of the wound. NPWT was instituted in the operating room using a commercially available system Negative pressure applied was of 120 mmHg continuous suction, and the dressings were changed every 5-6 days, in the operating room. The NPWT was used to treat deep and deep partial burn injuries of the upper limb in two patients and of the lower limb in other two cases. Three patients healed by epithelization and one required partial skin grafting.

Conclusions: NPWT has the potential of becoming a new standard for burn patients. In our series, it helped decreasing the need for surgical treatment, the time for dressing changes and it proved reliable for use at very young ages.

ID439 A Clinical Case of Reccurent Patelo-femoral Instability

Cristian Geageac[1], Gabriel Bogdan Voicu[1], Bogdan Sendrea[2], Radu Alexandru Orfanu[1], Stefan Mogos[2], Gabriela Mihaela Stanciu[1]

[1]*Foisor Orthopaedic Hospital, Bucharest, Romania*
[2]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Objective: Reccurent patelo-femoral instability represents up less than 0.03% of the total orthopedic injuries.

The purpose of the current study was to present a clinical case of reccurent patelo-femoral instability.

Methods: A 16-year-old, female patient, with personal history, presented with right knee patello-femoral instability. The first episode dated 5 years ago while playing handball .

Initial clinical examination revealed a complete range of motion (ROM), normoalignement of lower limbs, no hydrarthrosis, positive aprehension test, positive patellar tilt test, positive „J sign", no associated frontal/sagital instabilities. The patient's objective IKDC was grade C and he scored 51/100 in the Kujala questionnaire.

The X-rays showed a Dejour Type B Trochlear Dysplasia bilaterally.

The MRI examination demonstrated a medial patello-femoral ligament(MPFL) tear and lateral patellar tilt and trochlear dysplasia.

The CT-Scan examination demonstrated a TT-TG 22mm on the right side and 20 mm on the left side, patellar tilt with relaxed/contracted cvadriceps 30/40 on the right side and 25/30 on the left side.

Deepening trochleoplasty was performed keeping a osteochondral flap of 3-4 mm and a Herberts screw and a 3 mm resorbable tape were used for fixation. The MPFL was reconstructed using gracillis autograft with the femoral tunnel positioned at the Schottle point under C-arm control and the lateral retinculum elongation was performed.

Supine quadriceps isometric contraction and range of motion were started early postoperatively. A Hindged Knee Brace was recommended continuously during the first 4 weeks with progressive ROM increase.The patient was evaluated at 6 and 12 months postoperatively.

Results: Following the procedure, the apprehension test and the J-sign were negative.The patient's IKDC objective score increased to grade A and the Kujala score from 51 to 89.

Conclusions: The combined Trochleoplasty, MPFL reconstruction and lateral retinaculum elongation, showed good short term clinical outcomes.

ID 442 The Improved Diagnosis Of Ramp Lesions of the Medial Meniscus Associated with Anterior Cruciate Ligament Injury Using the Accessory Postero-Medial Portal

Cristian Geageac[1], Stefan Mogos[2], Radu Alexandru Orfanu[1], Bogdan Sendrea[2], Gabriel Bogdan Voicu[1], Gabriela Mihaela Stanciu[1]

[1]Foisor Orthopaedic Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objective: Posterior ramp lesions of the medial meniscus are frequently present and sometimes missed in ACL reconstructive surgery. The purpose of this study is to evaluate the importance of an additional postero-medial portal in diagnosing posterior ramp lesions of the medial meniscus in ACL reconstructive surgery.

Methods: Between January-December 2021 a number of 62 knees with an ACL injury were evaluated for the presence of a posterior ramp lesion of the medial meniscus. The posterior ramp of the medial meniscus was explored in 3 different ways. At first, they were inspected through the standard antero-lateral portal. The second way of exploration was through the antero-lateral portal with the scope passed between the posterior cruciate ligament and the medial femoral condyle. The third stage of exploration was through an additional postero-medial portal. The presence of the lesion was noted at every stage of the arthroscopic exploration.

Results: Medial meniscus tears were diagnosed in 24 patients (38,7%), with an average age of 26 years and a sex ratio M:F 2:1. Twelve lesions (50%) were diagnosed through the standard antero-lateral portal via direct visualization and probing. Eight lesions (33,33%) located in the posterior horn were diagnosed in the second stage and 4 lesions – 16,67% in the third stage of the exploration.

Conclusion: Arthroscopic visualization with the scope deep in the medial part of the notch and by using an additional postero-medial portal is important in the diagnosis of posterior ramp lesions of the medial meniscus otherwise susceptible to be missed (49,9%).

ID458 Unusual Case of Complex Reconstruction After Household Voltage Electric Pediatric Hand Burn

Bianca Maria Bradea[2], Bogdan Prisecaru[2], Cristina Stoica[2], Maria Tomita[2], Dan Mircea Enescu[1,2], Raluca Tatar[1,2]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Emergency Hospital for Children Grigore Alexandrescu, Bucharest, Romania

Unusual case of complex reconstruction after household voltage electric pediatric hand burn

Objectives: Burn lesions caused by low-voltage electric current are relatively common forms of mechanical trauma in children and they are rarely associated with significant complications. However, if prolonged contact or muscle tetany is involved, the injuries can be devastating, leading to a higher grade of disability or the necessity of complex surgical procedures in order to reestablish the function and anatomical aspects of the affected region.

Methods: We present the case of a 6 year old male patient that suffered a low-voltage electrical injury and was referred to our Plastic Surgery and Burns Department 5 days after the accident. The contact points were the oral mucosa and the right thumb, where we registered an elliptic volar skin defect of 3x2 cm (full thickness burn) with impaired thumb flexion. No fracture was detected at the radiologic exam of the hand.

Results: Intraoperative wound exploration confirmed complete laceration of the flexor pollicis longus (FPL) tendon. Given the high tension observed at the attempt of repairing the FPL by direct suture, we had to use a tendon graft harvested from the ipsilateral palmaris longus tendon. The skin defect above the tendon was covered with a cross-finger flap raised from the right index finger. The donor site was further covered with a full-thickness skin graft harvested from the ipsilateral radio-carpal joint region. The hand was splinted for 3 weeks and specific rehabilitation therapy was initiated afterwards. Regular follow-up is required to assess the restoration of the thumb function.

Conclusions: Low-voltage electric injuries usually heal conservatively or are resolved with skin grafts. Nevertheless, when facing very deep hand lesions encompassing soft tissue and tendons, the reconstruction requires complex surgical approaches. Correct injury assessment together with a careful operation planning and the right choice of plastic surgery techniques, will ensure the best conditions for an optimal restoration of the impaired function.

ID485 One Stage Reconstruction of Collateral Medial and Cruciate Ligaments after KDIII M Schenck Knee Dislocation

Bogdan Gabriel Voicu[1], Mihaela Gabriela Stanciu[1], Cristian Geageac[1], Stefan Mogos[1,2], Bogdan Sendrea[1,2], Alin Gabriel Sterian[2]

[1]Foisor Orthopaedic Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objective: The purpose of the current study was to present a clinical case of multiligamentous reconstruction following traumatic knee dislocation and the short term clinical outcomes.

Methods: A 27-year-old, overweight male patient, presented with left knee instability and pain after an injury 3 months prior.

Clinical examination was difficult because of the limited range of motion (ROM) due to 4 weeks of immobilization. After rehabilitation, full ROM was recovered, revealing a positive Lachman test, positive posterior and anterior drawer tests, valgus stress and dial test. The patient scored 38/100 in the subjective IKDC score, 42/100 in the Lysholm questionnaire and graded C in the objective IKDC score.

The imagistic investigations (stress X-rays and MRI) confirmed the clinical diagnosis of ACL, PCL and MCL lesions, thus a type KD III M Schenck knee dislocation was diagnosed.

The ACL was reconstructed using patellar tendon autograft through an outside-inside technique, while MCL and PCL were reconstructed using modified La Prade techniques with ipsilateral and contralateral hamstring tendons. The arthroscopic approach involved 4 portals: anteromedial, anterolateral, posteromedial and posterolateral. An anterior incision of the knee was made for harvesting the patellar tendon and the MCL was reconstructed anatomically through an open approach using a 10 cm incision on the medial aspect of the knee.

Range of motion exercises were started early postoperatively, a Jack Brace was recommended during the first 6 months postoperatively and progressive weight bearing using crutches.

Results: Following ligament reconstruction, Lachman test, posterior and anterior drawer tests, valgus stress and dial test were negative. The patient's IKDC subjective score increased to 84/100, the Lysholm score to 90 and his objective IKDC was grade A.

Conclusions: Multiligamentous reconstruction following knee dislocation showed good short term clinical outcomes allowing progressive return to the pre-traumatic physical activities.

ID486 Percutaneous Needle Fasciotomy for Dupuytren Contracutre Case Series

Bogdan Gabriel Voicu[1], Mihaela Gabriela Stanciu[1], Nicolae Alexandru Rosu[1], Stefan Mogos[1,2], Bogdan Sendrea[1,2], Alin Gabriel Sterian[2]

[1]Foisor Orthopaedic Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objective: The purpose of this paper is to present the percutaneous needle fasciotomy for Dupuytren contracture on a series of cases.

Methods: All patients presented with Dupuytren contracture in evolution for a mean of 8 months, accusing decreased hand function and pain. Physical exam revealed nodules and chords, nodules being the first ones to appear, most frequent on the ring and small fingers. Hueston's test was positive for all patients and the diagnosis was confirmed through ultrasonography.

Conservative treatment consisted of range of motion exercises, thus needle aponeurotomy was indicated. Local anesthesia is injected at the level of the chord and after numbing, it is punctured repeatedly at different angles in a fan shaped pattern with the digit in full extension, until the full rupture of the chord is felt or heard and the joint straightens. Full extension of the digit must be obtained, confirmed and a bandage is applied. Movement starts immediately postoperatively, with daily range of motion exercises and stretching for as long as possible to prevent recurrence, which unfortunately is a frequent complication.

Before, during and after the intervention sensitivity in the affected finger is checked, the patients being instructed to mention any pain or paresthesia during the procedure. The flexor tendons underneath the chord and neurovascular bundle can be avoided by puncturing from a horizontal/oblique angle.

Results: All patients had favorable evolutions postoperatively, with full extension of the digit. Patients who do not achieve active extension as much as the passive one used a night splint which maintained the digits in full extension, for a maximum of 1 month.

Conclusions: Percutaneous needle fasciotomy for Dupuytren contracture is a safe, fast and cost effective procedure that can be performed for patients with unsatisfactory results from the conservative treatment.

ID487 Intramedullary Nailing of Humeral Diaphyseal Fractures - Case Series

Bogdan Gabriel Voicu[1], Mihaela Gabriela Stanciu[1], Cristian Geageac[1], Stefan Mogos[1,2], Bogdan Sendrea[1,2], Alin Gabriel Sterian[2]

[1]Foisor Orthopaedic Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objective: In this case series the purpose is to present the intramedullary nailing of humeral diaphyseal fractures with its short and medium term results.

Methods: All patients sustained closed fractures of the humerus. The mean patient age was 60.5 years old. The main symptoms of the patients were pain, significantly decreased range of motion (ROM), and swelling while the physical exam revealed ecchymosis, bone crepitus, angulation of the arm.

Conservative treatment with immobilization in a cast or brace was initially tried for 2 to 8 weeks before progressing to operative treatment, consisting of intramedullary nailing with distal locking. This approach has advantages over ORIF mainly because the periosteum and hematoma remain in place of the fracture, helping the healing of the bone and reducing the risk of pseudarthrosis.

Neurovascular exam was performed before and after surgery. The approach consists of a lateral incision on the anterolateral aspect of the acromion and dissection through the fascia and rotator cuff interval. A guidewire is inserted over the fracture site under X-ray control and the reduction of the fracture is performed. The canal is reamed, the nail is inserted and interlocked proximally with 2-3 locking screws and distally with 1 screw. After the X-ray control, lavage and hemostasis, anatomical planes are sutured. Physical effort is limited and a sling is worn for 4 weeks, after which shoulder ROM exercises should start.

Results: Following intramedullary nailing ROM was recovered gradually, radiologically consolidation was present at 3-6 months. No complications such as iatrogenic nerve injury or malunion were documented.

Conclusions: Intramedullary nailing of humeral diaphyseal fractures is a favorable treatment option after conservative treatment failure or if the indications for surgical treatment are present, with clear advantages of not opening the fracture site and rapid mobilization.

ID488 Open Reduction and Internal Fixation with Bone Graft Addition for Scaphoid Non-Union Surgical Technique and Case Series

Bogdan Gabriel Voicu[1], Mihaela Gabriela Stanciu[1], Horatiu Nicu Patrulescu[1], Stefan Mogos[1,2], Bogdan Sendrea[1,2], Alin Gabriel Sterian[2]

[1]Foisor Orthopaedic Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objective: The purpose of this paper is to present a minimally invasive surgical technique in treating scaphoid non-unions on a series of cases.

Methods: All patients were diagnosed with scaphoid non-union at a minimum post-traumatic window of 8 weeks, on clinical symptomatology confirmed either through failure of ossification or the absence of callus formation on x-ray or computed tomography.

During surgery, a dorsal incision spanning the scaphoid and Lister's tubercle in order to gain access to the non-union and the graft harvest sites. The non-union is debrided, bone graft is harvested underneath Lister's tubercle and impacted in the non-union site. The bone fragments are reduced and fixed with a head-less compaction screw under fluoroscopy guidance. Postoperatively, the hand is placed in a compressive bandage for 48h and a splint for 4 weeks. Passive range of motion is initiated after 3 weeks post-operatively.

Results: All patients had favorable outcomes at 6 months, with full range of motion and radiological callus formation on x-ray/CT. There were 2 patients with reactive postoperative neuropathy and 1 patient with persistent wound drainage.

Conclusions: Open reduction and internal fixation with bone graft addition for scaphoid non-union is a safe, minimally invasive and cost effective procedure that can be performed for patients with unsatisfactory results from the conservative treatment, with an excellent clinical and radiological outcome.

ID490 Intraoperative Surprise During an Emergency Abdominal Wall Abscess Surgery

Danut-Constantin Ciotirla[1,2], Radu Mirica[1,2], Catalina Simeanu[1], Andrei Vacarasu[1], Razvan Iosifescu[1,2], Octav Ginghina[1,2], Niculae Iordache[1,2]

[1]*„Sf. Ioan" Emergency Clinical Hospital, Bucharest, Romania*
[2]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Introduction: Due to the restricted vascularity of the anterior abdominal wall, anterior abdominal wall abscess is a rare condition. Anterior abdominal wall abscesses can manifest as a single disease without any intra-abdominal pathologic features and are sometimes linked to conditions like diabetes and immunosuppression. Most anterior abdominal wall abscess cases that have been reported in the literature are caused by intra-abdominal pathology.

Materials and methods: We are going to present you a case of a female patient, age 72, who presented in the St John Emergency Clinical Hospital with an altered condition, pain in the left hemiabdomen and an abdominal wall mass.

Results: In the ER of St John Emergency Clinical Hospital, a 72-year patient with a history of type II diabetes, arterial hypertension and grade I hydroureteronephrosis presented with an altered condition, diffuse pain in the left hemiabdomen, especially on the left flank, where we can find an abdominal wall mass, with no signs of peritoneal irritation. Biologic, patient presented leukocytosis, anemia and inflammation.

The CT scan showed us a pseudo nodular mass in the left abdominal wall with a fluid collection inside and also the anterosuperior wall of the bladder is tractioned and fixed in place at the anterior abdominal wall.

Due to the condition of patient, biologic and imagistic consideration we decided to take action and perform a damage control emergency surgery for draining that fluid collection found in the left abdominal wall mass. During surgery we had a surprise as in we found the bladder fistula in the cavity of the abscess using methylene blue injection on the urinary catheter.

Post-surgery the patient didn't had a favorable evolution, 2 weeks later she died due to complications of comorbidities.

Conclusions: As we found in literature most reports of abdominal wall abscess are associated with intra- abdominal pathology so was the case of our patient. We would like to point out the necessity for emergency hospitals to have a wide range of emergency specializations and the importance of a multidisciplinary approach in cases like the one presented here.

ID491 Spanning External Fixation of Comminuted Distal Radius Fractures Case Series

Bogdan Gabriel Voicu[1], Mihaela Gabriela Stanciu[1], Horațiu Nicu Patrulescu[1], Stefan Mogos[1,2], Bogdan Sendrea[1,2], Alin Gabriel Sterian[2]

[1]*Foisor Orthopaedic Hospital, Bucharest, Romania*
[2]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Objective: The purpose of this paper is to present the surgical technique for external fixation of comminuted distal radius fractures and postoperative evolution of a series of patients.

Methods: Distal radius fractures were diagnosed on a series of patients who presented with history of falling on the outstretched hand (wrist deformity, pain, swelling and limited range of motion). All fractures were closed and comminuted.

Intraoperatively the first step is the reduction under anesthesia and fluoroscopy control, which will be maintained by ligamentotaxis after the external fixator is positioned. The first pins installed are proximal, placed under fluoroscopy at 5 to 10 cm proximally to the radial styloid, at the bare area of the radius located between muscles, at 45° to the long axis of the forearm. The distal pins are positioned at the bare area of the proximal third of the second metacarpal, between extensor tendons. The pins were inserted through the middle of the metacarpal bone and verified by fluoroscopy.

After the pins are in place, rod connectors are applied and one or two rods are installed for increased resistance. Reduction is checked again, all screws are tightened and a bandage that doesn't affect thumb movement is applied.

The fixator is left in place for at least 6 weeks, the pins and skin are disinfected and sterile bandage is applied daily, thumb and elbow movements are encouraged early postoperatively.

Results: All patients had satisfactory union of the fracture at 6 weeks given the highly comminuted fractures, with low complication rate.

Conclusions: External fixation for closed comminuted distal radius fractures is a good treatment option, dependent on the accuracy of the reduction, the postoperative care of the pins and early movements of the wrist and fingers after fixator extraction.

ID492 Retrograde Minimally Invasive Carpal Tunnel Release Surgical Technique and Case Series

Bogdan Gabriel Voicu[1], Mihaela Gabriela Stanciu[1], Horatiu Nicu Patrulescu[1], Stefan Mogos[1,2], Bogdan Sendrea[1,2], Alin Gabriel Sterian[2]

[1]Foisor Orthopaedic Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objective: The purpose of this study is to present the retrograde minimally invasive carpal tunnel release surgical technique on a series of patients with median neuropathy.

Methods: The mean patient age was 57 years. Presenting symptoms: night pain and paresthesia in the first three fingers. The physical exam revealed variable limitation of thumb abduction and thenar eminence hypotrophy. Tinel and Phalen tests were both positive in the majority of cases. Although an electromyographic study is non-essential, it is the most sensitive test for neuropathic confirmation.

The surgical ligamentotomies were performed by the same surgical team, on a standard operative table, with the same type of instruments. An incision of approximately 2 cm is made at the intersection of Kaplan line with the interdigital line between the IIIrd and IVth digits. Subcutaneous and palmar tissue is dissected until the transverse carpal ligament (TCL) is identified and visualized accordingly, continuing the dissection until the forearm fascia is identified. The TCL and distal part of forearm fascia are released under direct visualization with a pair of scissors.

The release is confirmed by checking if there are any bands of the ligament left uncut and the median nerve is explored to ensure decompression. The wound is lavaged and only the skin is sutured. A compressive bandage is worn for 24 hours postoperatively and a soft dressing further on. Movement is encouraged as tolerated.

Results: Postoperatively the pain decreased in intensity gradually until disappearing at 6 to 12 weeks, while paresthesia lasted between 24 to 48 hours after surgery.

Conclusions: Retrograde minimally invasive carpal tunnel release is an effective surgical technique, with symptomatology gradually improving postoperatively, with satisfactory aesthetic results because of the small incision usually performed within a skin crest.

ID493 Ultrasound-guided Needle Release of A1 Pulley for Trigger Finger Case Series

Bogdan Gabriel Voicu[1], Mihaela Gabriela Stanciu[1], Denis Chirilo[1], Stefan Mogos[1,2], Bogdan Sendrea[1,2], Alin Gabriel Sterian[2]

[1]Foisor Orthopaedic Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objective: The aim of this paper is to describe the surgical technique for US guided trigger finger release and the advantages over open and blind percutaneous release.

Methods: The main symptomatology of the patients was pain, limited finger extension and/or flexion, tenderness. Palpable palmar nodules and history of repetitive or vibratory activities and microtrauma were present. The trigger finger diagnosis was made clinically and confirmed by ultrasonographic examination, statically and dynamically.

The intervention starts by identifying the thickened A1 pulley by ultrasonography. Local anesthetic is then injected and after numbing the area a needle is introduced longitudinally, parallel to the flexor tendons, under US-control. Before releasing the pulley the neurovascular structures should be identified and avoided during the intervention. With repetitive but small movements the A1 pulley must be sectioned so that the flexor tendon is freed. Passive extension and flexion are verified and confirmed and a sterile bandage is applied.

Postoperatively movement of the finger starts immediately as tolerated.

Results: Symptomatology significantly improved after the intervention and maintained at the 3 months follow up. Aesthetic and functional outcomes were satisfactory for the patients.

Conclusions: Ultrasound-guided needle release of A1 pulley for trigger finger is a quick, non-invasive, non-radiative, cost-effective procedure. It offers the advantage of direct visualization of the structures over the blind release and mainly the aesthetic advantage over the open procedure and it has a low rate of recurrence.

ID499 Small Bowel Obstruction Due to an Internal Hernia Caused by an Apendiculo-Enteral Adhesion - Case Report

Teodora Delia Chiriac[1,3], Octavia Cristina Rusu[1], C.C. Popa[1,3], R. Pargaru[1,3], Irina Tatu[2], R.V. Costea[1,3]

[1]*Second Clinic of Surgery, Univeristy Emergency Hospital of Bucharest, Romania*
[2]*Radiology Clinic, Univeristy Emergency Hospital of Bucharest, Romania*
[3]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Objectives: Internal hernias are defined as the displacement of an abdominal internal organ thorugh an aperture of the peritoneum or mesentery. Internal hernias can be primary or secondary. Secondary internal hernias are more frequent, caused by adhesions or iatrogenic defects. Primary internal hernias are rare

Method: In July 2022, a 86-year-old woman women presents at the emergency room of University Emergency Hospital of Bucharest, with diffuse abdominal pain and malaise which started 30 hours before presentation. She had no relevant medical history. The ultrasound examination revealed: small bowel loop distension with slow peristaltism and a large ammount of free liquid in the abdomen. The abdominal CT scan showed ileal loop distension with air-fluid levels; in the pelvic region there was a thickened intestinal loop, with walls measuring 9mm, and a collabated loop with normal contrast enhancement, the image highly suggesting small bowel obstruction. Laboratory findings were leukocytosis and high blood nitrogen.

Results: The patient undergoes emergency surgery which revealed: small bowel obstruction due to an apendiculo-enteral adhesion with infarction of the small bowel and secondary peritonitis. We practiced small bowel resection, appendectomy and the formation of an ileostomy. The postoperative status of the patient is favorable. The pathological findings showed: intestinal infarction and acute appendicitis.

Conclusions: Primary internal hernias remain a scarce diagnosis in current medical practice. This affliction is often seen on a radiologic examination and confirmed intraoperatively. The small bowel obstruction secondary to an internal hernia remains extraordinary.

ID501 The Isthmocele - A Pathology that Requires Ultrasound Screening

Anca Ricu[1,2], George Rosu[1,2], Alexandra Matei[1,2], Giorgia Zampieri [1,2], Irina Pacu[1,2], Mihai Dimitriu[1,2], Cringu Ionescu[1,2]

[1]*Emergency Hospital "St. Pantelimon", Bucharest, Romania*
[2]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Abstract: The increase in number of caesarean section has resulted in an increase in cases of isthmocele development. An isthmocele represent a myometrial discontinuity or a triangular anechoic defect in the anterior uterine wall, and is the result of incomplete healing of the isthmic myometrium after a low transverse uterine incision for caesarean section. Although it is usually asymptomatic, the main symptom is abnormal or postmenstrual bleeding, and chronic pelvic pain. Infertility, placenta accrete or previa, scar dehiscence, uterine rupture, and cesarean scar ectopic pregnancy may also appear as complications of this condition. There is no international standardized diagnosis for isthmocele and several imaging methods can be used to assess the integrity of the uterine wall and thus diagnose an isthmocele. Transvaginal ultrasound and saline infusion sonohysterography emerge as specific, sensitive and cost-effective methods to diagnose isthmocele. There is no gold standard or treatment protocol for isthmocele repair, and no technique that has shown a statistically superior outcome. The treatment includes clinical or surgical management, depending on the size of the defect and the presence of symptoms.

ID504 The Surprise of an Emergency Appendicectomy!

Catalina Simeanu[1], Andrei Vacarasu[1], Danut Constantin Ciotirla[1], Radu Mirica[1,2], Razvan Iosifescu[1,2], Octav Ginghina[1,2], Niculae Iordache[1,2]

[1]Emergency Clinical Hospital Bucharest, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Introduction: The appendix malignant tumours include mucinous epithelial neoplasms, neuroendocrine tumours(typical carcinoid tumors), with goblet cells or composite carcinoma, lymphomas, adenocarcinoma and lymphatic sarcoma or mesenchymals. Hystopatologically more than half of appendiceal tumors have a neuroendocrine origin. These tumours are rarely suspected before sugery, the final diagnosis being the intraoperative one and the one established by the hystopatological exam. The mucinous appendiceal neoplasm represent a low percentaje of all types of appendicectomy.

Materials and methods: We present the case of a 44 year old, filipino-female patient who came to the St. John hospital the Intensive Care Unit with poor general state of health, severe pains in the right iliac fossa associated with episodes of nausea and vomiting, fever which started 12 hours before.

Results: The clinical examination of patient revealed: suppled abdomen, spontaneously painful and at the palpation of the right iliac fossa which associates signs of peritoneal iritation. The biological samples highlight a hypocromic microcytic anemia (Hgb=10.3 g/dL), leukocitosis with neutrophilia. At the abdomen and pelvis CT scan with contrast substance there were identified: acute appendicitis with right appendicular parietocolic plastron.

It is decided an emergency surgery and under general anesthesia laparoscopically it is performed an appendicectomy with the lavage and draining of the peritoneal cavity. The postoperative evolution was a favourable one.

The hystopathological examination of the appnedicectomy piece reveals: appendiceal mucocele

Tacking into consideration the histopathological results it is decided to perform surgically at a later date the ileohemicolectomy with an ileotransvese anastomosis.

Conclusions: The mucinous appendicular neoplasm represents a rare disease, the management of the diagnosis and treatment is a challenge. The ultrasound and CT scan are major investigations in the diagnosis of the appendicular mucocele in case of emergency, but a certain diagnosis is estabilished through the hystopatological exam. The seriate surgery is frequently used.

ID526 Rare Pathological Association Appendicular Actinomycosis and Toldt's Fascia Coalescence Defect

Octavia Cristina Rusu[1,3], Teodora Delia Chiriac[1,3], Razvan Pargaru[1,3], Cristian Constantin Popa[1,3], Andreea Iliesiu[2,3], Radu Virgil Costea[1,3]

[1]University Emergency Hospital Bucharest, Second Department of Surgery, Bucharest, Romania
[2]University Emergency Hospital Bucharest, Department of Pathology, Bucharest, Romania
[3]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Introduction: Actinomycosis is a rare, slow-growing granulomatous disease caused by an anaerobic, Gram-negative, filamentous bacterium. Peritoneal actinomycosis occurs when the digestive mucosal barrier is damaged, being favoured by poor oral hygiene and dental interventions. Congenital defects of colonic coalescence are rare malformations, often incidentally discovered during imagistic or intraoperative explorations.

Material and method: We present the case of a 27-year-old patient, known to have had dental braces for approximately one year, with no other significant medical history. The patient was hospitalized for right iliac region pain, progressively increasing three days prior to admission. Laboratory tests showed moderate leukocytosis and inflammatory syndrome. Abdominal ultrasound suggested acute abscessed appendicitis. Emergency surgery was performed by Mc Burney incision, finding a coalescence defect of the Toldt's fascia, with the absence of the cecal appendix in the right inferior abdominal quadrant and a tumor mass in the upper abdominal area. Median laparotomy was decided and appendicular tumor was found. Appendectomy was performed, with an uneventful postoperative course.

Results: Pathological examination showed exacerbation of chronic appendicitis in the context of infection with Actinomyces israelii. The patient continued postoperatively the specific antibiotic treatment in order to eradicate the abdominal infection.

Conclusions: The diagnosis of acute appendicitis can sometimes be difficult, requiring a differential diagnosis with other pathologies that can lead to the appearance of acute abdomen, especially when there are concomitant abnormalities of colonic coalescence. Furthermore, actinomycosis often imitates other infections or malignancies, both from clinic and paraclinically point of view. Pathological examination is the only method of investigation that can accurately determine the characteristics of a tumor and its progression potential.

ID531 Accurate Diagnosis of Cleft Palate as a Toll for Proper Counselling

Lucian Pop[1], Mădălina Dumitrașcu[1], Oana Daniela Toader[1]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Orofacial clefting is among most common congenital non lethal abnormalities and its incidence is steadily rising, ranging from 1/1000 to 1/2500 in different populations, varying with geographic location, ethnic group and socio economic conditions.

An accurate diagnosis helps parents in making their decision and contributes to the management and planning of the case.

Between week 4 and week 8 , the primary palate is developing. It includes the upper lip, philtrum, alveolar ridge and the triangular area of the hard palate anterior to the incisive foramen. The posterior part of the palate is developed later, between the 8th and 10th weeks), and is also called secondary palate. The complex process involved in formation of the face and the small size of this structures can make the diagnosis of these abnormalities problematic.

The purpose of this paper is to summarize some of the main techniques used in the diagnosis of cleft palate in 1st and 2nd trimester of pregnancy. We take into account not only the conventional 2d techniques but also we refer at 3D techniques that have showed their utility in diagnosis and management of cleft lip and palate.

We acknowledge that it is difficult to introduce all this techniques in routine scans but whenever there is suspicion of palate defect the sonographer should use all these tools in providing an accurate diagnosis.

ID533 Our experience in 10 years of post-bariatric surgery

Andrei Marin[1,2], Mirela Tene[1], Elena Burlacu[1], Carmen Giuglea[1,2]

[1]*„Sf. Ioan" Emergency Clinical Hospital, Bucharest, Romania*

[2]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Objective: Obesity represents a major health problem across the world. Patients who lose weight are often confronted with another major issue – excessive skin and ptosis in all regions where adipose tissue was abundant. This problem interferes both with the physical and the psychological well-being of the patients, who want to live a normal life. Post-bariatric surgery is the key in solving these issues, as it involves removing excessive skin and subcutaneous tissue and tightening the skin at the level of the waist, thighs, arms and breasts.

Methods: We performed over 300 post-bariatric surgeries over the last 10 years. Restoring the protein balance and achieving normal blood count is imperative prior to post-bariatric surgery, in order to prevent complications. For a total body transformation, we perform 2 stage surgeries – first we perform circumferential abdominoplasty together with arm lifting. After 3 months we perform the second stage – thigh lift together with mastopexy. For both interventions a trained team of 4 surgeons is required to work together to achieve an operation time of under 4 hours.

Results: The overall results are very good, with excellent patient satisfaction. The main complications after post-bariatric surgery is wound dehiscence, which can be prevented by rebalancing the blood values prior to surgery and by creating adequate size flaps in order not to have high skin tension. When dehiscence occurs, it can be solved either by wound dressings and secondary healing or by vacuum therapy. One aesthetic issue of these interventions is the long scars; however, these are placed in inconspicuous areas and the final result is quite satisfactory.

Conclusion: Post-bariatric surgeries may have some important complications, but the final results are worth the risk. Patient satisfaction is high and they can resume a normal and healthy lifestyle after the operation.

ID534 Patellar Denervation Effect on Anterior Knee Pain and Functional Results After Tka of Patellar Denervation

Gabriela Mihaela Stanciu[1], Cristian Geageac[1], Gabriel Bogdan Voicu[1], Bogdan Sendrea[2], Stefan Mogoș[2], Radu Alexandru Orfanu[1]

[1]Foisor Orthopaedic Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy Bucharest, Romania

Objectives: This study's purpose is to compare anterior knee pain, based on VAS scale and Kujala score, after bicondylar knee arthroplasty, with or without patellar denervation, and its impact on functional outcomes based on patient report.

Methods: This prospective study included 124 patients before TKA. They were randomized into two groups: group A with electrocautery circumferential patellar denervation and group B without electrocautery denervation. All TKAs were performed by the same surgeon using the same implant. Osteophytes excision was performed for all patients. In patellar denervation group, patellar cauterization was performed circumferentially at 3mm away from the patellar rim. Preoperative femoral-patellar osteoarthritis degree was measured using Kellgren-Lawrence grading system and there were no differences between the groups. Clinician-reported outcomes (Kujala score, ROM) and patient-reported outcomes (VAS scale, Oxford knee score, KOOS) were registered at 6, 12 and 24 months follow-ups.

Results: Baseline osteoarthritis degree was the same between the groups. At 24 months follow up, there were no differences between mean Kujala scores (82 ± 2.5 in group A, 81 ± 3.2 in group B, p=0.5). The mean ROM was 123,3° ± 5° in patellar denervation group and 122,8° ± 4.7° for non-cauterized knees (p=0.81). VAS pain score was 3 ± 0.6 in the cauterized knee and 3 ± 0.4 in the non-cauterized knee (p = 0.92). Neither Oxford knee score (39.6 ± 2.1 versus 41 ± 2.9) nor KOOS results showed a significantly statistic difference.

Conclusion: Circumferential patellar cauterization showed no superior results in terms of anterior knee pain nor functional outcomes compared to non-cauterized group.

ID541 Malignant Granular Cell Tumor of the Arm - Case Report

Razvan Danciu[1], Mihai Mehedintu[1], Anca I. Toma[1], Corina Stefan[1], Cristian R. Jecan[2]

[1]Department of Plastic and Reconstructive Surgery, "Prof. Dr. Agrippa Ionescu" Emergency Clinical Hospital, Bucharest, Romania
[2]Department of Plastic and Reconstructive Surgery, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Introduction: Granular cell tumor (GCT) is a rare form of soft tissue cancer that is usually benign. Its malignant evolution is encountered in less than 2% of cases, having a more rapid and unfavorable evolution. Clinical presentation betraying malignant features could be increased tumor size, rapid growth, deep localization, and female gender.

Case presentation: This paper presents the case of a 52-year-old patient with a hard, rapidly evolving tumor in the left arm. The diagnosis of granular cell tumor was made based on histopathological examination using the Fanburg and Smith criteria to differentiate the formation as malignant, but with certainty this was subsequently confirmed by the existence of a metastasis.

Results: Surgical excision was performed and the evolution was favorable. Evolution and treatment differ depending on the benign or malignant form, but surgical treatment with wide local excision is recommended. This may be followed by chemotherapy or radiotherapy, and follow-up of patients for the rest of their lives is mandatory.

Conclusions: The particularity of the presented case resided precisely in the common clinical form of presentation, which drew the attention of doctors to the importance of differential diagnosis when talking about such a rare condition. Histopathological examination using the Fanburg-Smith criteria allows the disease to be classified as malignant, thus requiring wide excision. Surgical treatment remains the best therapeutic solution, followed by adjuvant therapy. Regardless of the nature of the initial disease, all patients should be carefully monitored for the rest of their lives for the possibility of recurrence or distant metastasis

ID556 Surgical Management of Penile Reconstruction

Gavrila Iulia[1,2], Oana Andrei[2,3], Dumitrache Serban[1,2], Istrate Horatiu[2], Velicu Daniel[3], Giuglea Carmen[1,2]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Clinic Emergency Hospital "Sf. Ioan" Bucharest, Romania*

Objective: There are a multitude of causes that can affect the penile skin, among which we mention Fournier's gangrene, injection with various foreign substances (lip balm, kanamycin), various traumas. The objective of the paper is to show the best reconstructive methods according to the etiology of the penile skin defect.

Method: We present a series of cases of reconstructive procedures for penile area after Fournier's gangrene, dog bite and lesions secondary to foreign body reaction that has been performed in our clinic. The patients have skin defects on penile region and we want to compare the results of different surgical techniques taking into account the particularities of each case and the advantages and disadvantages.

Results: We use for reconstruction different types of local flap (McGregor flap, scrotal flap – unipedicle and bipedicle) and skin graft. All these different techniques have their limitations, indications, advantages and disadvantages. We will present the final results for each technique.

Conclusions: It should be taken into account that traumas with penile skin avulsions, excisions after Fournier's gangrene, as well as foreign body reactions occurring after injection at the level of the penis, leave large defects. For this reason, the reconstruction of the penis is a challenge both from an aesthetic and functional point of view.

ID577 Managing Critical Post-Mastectomy Complications - Case Report

Silviu Marinescu[1,3,4], Carmen Giuglea[2,3,4], Diana Lora Pârvu[1,4], Andreea Badeana[1,3], Diana Gheorghiță[3], Muhannad Alsmairat[1]

[1]*"Bagdasar-Arseni" Emergency Hospital, Plastic and Reconstructive Department, Bucharest, Romania*
[2]*"St John" Emergency Hospital, Plastic and Reconstructive Department, Bucharest, Romania*
[3]*"Pogany" Aesthetic Clinic, Bucharest, Romania*
[4]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

Background: Mastopexy is an aesthetic procedure for breast ptosis that aims to deliver youthful, attractive breasts. Deficient skin elasticity, weak Cooper's ligaments, weight changes, pregnancy, and breastfeeding, aging and lifestyle decisions like smoking, prolonged sun exposure or high-impact activity without adequate breast sustainability are some of the variables that affect this condition. Depending on the needs and desired results of each patient, the surgical options typically address tissue and nipple areolar complex repositioning along with excision of the excess tegument. Scarring, dehiscence, necrosis, asymmetry, nipple malposition, recurring ptosis, and general discontent are possible consequences. Though a relatively uncommon complication, mastopexy-related necrosis can have disastrous outcomes.

Case presentation: A 45-year-old patient with no relevant medical history underwent mastopexy surgery in another clinic that left the patient with bilateral necrosis of the nipple areolar complex and inferior breast quadrants less than 24 hours after the procedure. Necrosis after mastopexy is a potentially fatal complication, its main worry is the loss of the nipple areolar complex or the skin flap. In this instance, we carefully and systematically removed the necrotic tissue. We used negative pressure wound therapy for two weeks with excellent reduction of the afflicted region in an effort to save the nipple and the areola. Skin grafting using split thickness grafts was required to repair the remaining lesion. Given the degree of damage the patient had at arrival, the postoperative outcomes were satisfactory and had a good aesthetic.

Conclusions: By making ample lateral flaps and wide-based pedicles, assessing intraoperative complications like skin or nipple ischemia, using leeches, taking broad-spectrum antibiotics, or switching to a free nipple graft if necessary, one can reduce the risk of necrosis. Finally, one should choose the right patient: a non-smoker with no associated comorbidities. Even though our patient had severe postoperative complications, by carefully managing them with a series of conventional debridements, vacuum-assisted wound closure and grafting of the persistent defect – all while preserving as much healthy tissue as possible to prevent breast volume loss and interfere with breast shape – our patient fully recovered with little scarring and disability.

ID578 Cheiloschisis Sequelae Treatment Using Costal Grafts and Fillers

Silviu Marinescu[1,3,4], Carmen Giuglea[2,3,4], Diana Lora Parvu[1,4], Andreea Badeana[1,3], Diana Gheorghita[3], Muhannad Alsmairat[1]

[1]"Bagdasar-Arseni" Emergency Hospital, Plastic and Reconstructive Department, Bucharest, Romania
[2]"St John" Emergency Hospital, Plastic and Reconstructive Department, Bucharest, Romania
[3]"Pogany" Aesthetic Clinic, Bucharest, Romania
[4]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Background: If left untreated, cleft lip, a congenital birth condition, can damage the nose as well as the upper lip, causing respiration, phonation and deglutition limitations. The rhinoplasty procedure, which is significantly more complicated than a typical aesthetic rhinoplasty because of the skin and nasal vestibule involvement, as well as the asymmetry of all the cartilaginous and bony parts, is one of the most significant surgical adjustments a plastic surgeon can undertake. The goal is to realign the lip's appearance while also improving its form and functionality.

Methods: Due to its strengths in support, simplicity in modeling and stability over time, costal cartilage has been shown in retrospective research conducted in the previous ten years to have great advantages. Between 2016 and 2021, 17 patients, aged between 18 and 23 years old, who met the requirements , underwent secondary rhinoplasty with costal cartilage graft, as well as nostril remodelling, Z-plasty for scarring of the philtrum and upper lip and filler grafting for nose tip and lip asymmetry in the Department of Plastic Surgery associated with the „Bagdasar Arseni" Clinical Emergency Hospital.

Results: In terms of outcome, rhinoplasty in individuals with cleft lip is not quite as simple and satisfying as a typical rhinoplasty. When a patient's nose and surrounding skin don't have the right composition, asymmetries can develop. Autogenic grafts, taken from the rib, auricle, or nasal septum, have minimal infection and ejection rates, making them a viable alternative for boosting strength and building structure. Even though the graft may occasionally resorb or become improperly placed, it is still the best treatment for these patients when used in conjunction with an upper lip scar revision and further fat or hyaluronic acid filler adjustments.

Conclusions: When cleft lip patients reach maturity, a secondary rhinoplasty is frequently required to treat the unbalanced lip asymmetries and insufficient nasal support. In our clinic, we were able to achieve satisfactory aesthetic results with the least amount of unevenness and fault awareness by using bone grafts and extra fillers to address the nose tip and upper lip boarder.

ID579 Hemodynamics Evolution in Burn Patients Treated with Bromelain-based Enzymatic Debridement

Diana Lora Parvu[1,4], Silviu Marinescu[1,3,4], Carmen Giuglea[2,3,4], Muhannad Alsmairat[1], Andreea Badeana[1,3], Siramona Toma[5], A.M. Stefanescu[1]

[1]"Bagdasar-Arseni" Emergency Hospital, Plastic and Reconstructive Department, Bucharest, Romania
[2]"St John" Emergency Hospital, Plastic and Reconstructive Department, Bucharest, Romania
[3]"Pogany" Aesthetic Clinic, Bucharest, Romania
[4]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[5]"Cronos" Aesthetic Clinic, Bucharest, Romania

Background: Since it has been approved in Europe, our Plastic and Reconstructive Department has begun using enzymatic debridement as an alternative to the traditional surgical eschar removal in the protocol of burn patients care with mixed pattern burns. The purpose of this study is to describe how enzymatic debridement affected the hemodynamic development of a number of burn patients who sustained thermal injuries through flame mechanism.

Matherials and methods: 27 patients with mixed pattern burns received enzymatic debridement between January 2019 and March 2021. The main places where the enzymatic agent was administered were the trunk and the lower extremities. In the early stages of the burn (between 12 and 72 hours after the moment of injury), patients were treated in accordance with the European Consensus Protocol, however 2 patients in particular underwent enzymatic debridement on more than 15 percent TBSA. The systemic inflammatory response and hemodynamic development of the bromelain-based therapy were studied.

Results: A TBSA application area of 12 percent was seen in 25 out of 27 individuals. An 18% off-label application area was present in the remaining 2 cases. During and a few days after the enzymatic debridement, we did not observe any appreciable variations in body temperature or blood pressure. Additionally, no adverse reactions to the debridement product were noticed during or after the procedure. The hemodynamics improved as compared to the blood tests taken before the debridement, with the exception of a hemoglobin drop caused by manageable bleeding, that did not put the patients at risk. Leukocyte count, lactate, CRP, CK and CK-MB values all decreased the days following therapy, but no significant alterations in the fibrinogen values were noticed. The levels of the electrolytes did not significantly differ before and after product application.

Conclusions: When performed in accordance with the Consensus Guidelines, bromelain-based enzymatic debridement is a safe substitute for eschar burn removal in mixed pattern burns as it can enhance both the local healing of the condition and the patient's hemodynamic stability.

ID604 Giant Lipoma on the Right Scapular Aria in Pediatric Patients: Case Report

Shirin Kassas[2], Nil Melek Geafar[2], Bogdan Prisecaru[2], Iulia Nacea[2], Raluca Tatar[1,2], Dan Mircea Enescu[1,2]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Grigore Alexandrescu Clinical Emergency Hospital for Children, Bucharest, Romania*

Objective: Lipomas are tumours made of adipose tissue and are soft to the touch, movable, and painless. Although lipomatous tumours are one of the most common type of mesenchymal tumours in adults, they account for less than 10% of all soft tissue lesions in pediatric patients. Most lipomas are less than 5 cm size. They are commonly located on the upper back, shoulders, and abdomen. It is possible to have more than one lipoma. They are usually treated by surgical removal. Medical imaging or tissue biopsy are used to confirm the diagnosis.

Methods: We present the case of a 17 year old male patient with a giant lipoma located on the right shoulder which has been increasing in size in the previous 6 months. On clinical examination, an approximatively 8x7 am size mass was palpated adjacent to the right scapula. The swelling was soft, nontender, and easily compressible with no evidence of increased local temperature. Patient showed evidence of multiple smaller lipomas on different part of the body.

Results: The patient underwent surgical removal of the tumoral mass located on the right shoulder blade. During the surgery, an 8x7x2,5 cm tumoral mass was extracted by creating an incision (9 cm long) directly over the lump , the fatty tissue is meticulously dissected away and the lipoma is sent for further histopathological examination. The incision is oriented to get minimal tension across the closure of the defect.

Conclusion: Large lipomas (over 5 cm) have indication for surgical excision for both cosmetic reason and for ruling out a liposarcoma. For our patient, the pathological examination concluded that the excised tumoral mass had the aspect of a benign lipoma. Lipomas are rarely life-threatening, but sometimes they may reoccur and are generally managed with repeated surgery.

ID605 Breaking Barriers of Heart Transplant with a Marginal Donor - Case Report

Horatiu Moldovan[1,2,3,4,5], Lucian Calmac[1,2], Silvia Preda[1,2], Irina Dobra[2], Claudia Nica[2], Mihai Cacoveanu[2], Sabina Safta[2], Vlad Anton Iliescu[1,6]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Emergency Clinical Hospital Bucharest, Bucharest, Romania*
[3]*Romanian Academy of Medical Sciences, Bucharest, Romania*
[4]*Sanador Clinical Hospital, Bucharest, Romania*
[5]*Politehnica University, Bucharest, Romania*
[6]*"Prof. Dr. C.C. Iliescu" Emergency Institute for Cardiovascular Diseases, Bucharest, Romania*

Background: Worldwide 21 million adults are suffering from end stage heart failure and numbers are increasing due to aging patient population. End-stage heart failure INTERMACS class 1 and 2 represent 50% of total heart transplants, but only 10% of the needed heart transplants are ensured due to insufficient donors. Half of them are imperfect grafts, referred to as marginal donors.

Methods: We present the case of a 62 yo male with a history of anterior myocardial infarction and cardiogenic shock. He was in INTERMACS class 1 due to ischemic cardiomyopathy in need of mechanical circulatory support. He also had immediate indication for heart transplant but there was only an imperfect heart available. Heart transplant was performend within 24 hours.

Twenty years later was addmited with NYHA class IV heart failure, hipertrophic cardiomyopathy, severe aortic stenosis with AVA 0,4 mm2. Aortic annulus was 20 mm and heavily calcified. He was known with renal disease stage IIIA and immunocompromised state, having a high surgical risk profile. Our institutional Heart Team considered TAVR.

The procedure was performed via transfemoral approach using a 23 mm balloon expandable aortic valve.

Results: Intraoperative transesophageal echocardiography showed normal functioning prosthesis, no para-valvular leaks.

Patient had a fast recovery with improved heart failure symptoms.

Conclusion: TAVR is a simple yet effective procedure for aortic stenosis. Only 9 cases of TAVR in heart transplanted recipients have been reported so far worldwide. Heart donor's criteria are limiting heart transplantation and too many patients are dying on waiting lists. Accepting marginal donor hearts can save more than 50% of end stage heart failure patients in class INTERMACS 1 or 2. The increasing number of surviving donors will determine an elevation in the complexity of related complications and the further development of future optimal solutions.

ID607 The Approach for Finger Defects of the Hand After Trauma

Iulia Gavrila[1,2], Cristian Dorin Gurau[3], Andrei Oana[2], Daniel Velicu[2], Carmen Giuglea[1,2]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Clinical Emergency Hospital Sf. Ioan, Bucharest, Romania*
[3]*Clinical Emergency Hospital of Bucharest, Romania*

Objectives: The reconstruction of fingers after trauma is essential for the good functionality of the hand and for the restoration of a normal life. This paper aims to review the most common reconstructive methods at the level of the fingers, with indications of each one, possible complications, advantages and disadvantages.

Method: We present a series of cases hospitalized and surgically treated in the St. John emergency clinical hospital in the last 10 years, presenting traumas at the level of the fingers. Various local reconstructive methods were used and we evaluated the postoperative results as well as the functional rehabilitation.

Results: The results were very good from an aesthetic and functional point of view. The patients had a quick socio-professionally integration. The donor areas had minimal morbidity and the complications that occurred were negligible.

Conclusions: For the reconstruction of the fingers, various reconstructive methods can be used that aim preserving their length and for a social and professional integration as quickly as possible. The local flaps used are easy to make with maximum benefits.

ID608 End-stage Heart Failure Current Perspective of the Rebirth of a Cardiac Centre

Horatiu Moldovan[1,2,3,4,5]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Emergency Clinical Hospital Bucharest, Bucharest*
[3]*Romanian Academy of Medical Sciences, Bucharest, Romania*
[4]*Sanador Clinical Hospital, Bucharest, Romania*
[5]*Politehnica University, Bucharest, Romania*

Abstract: From the first heart surgery performed for a superficial wound of the ventricular wall to the cutting-edge technology of stem-cell cardiac regeneration, medical experts have been developing new techniques and technologies to improve or replace cardiac function. This article is a testimony of a small step for the grand array of cardiac bridge-therapy and transplant centres, but a beginning that was demanded in a country with a long waiting list of patients eligible either for transplant, or implant of ventricular assist device and only one qualified centre. The debut of our centre was marked by the successful implantation of the left-ventricular assist device (LVAD) HeartMate III in a 54-years old male with ischemic cardiomyopathy, class IV NYHA (New York Heart Association) heart failure and a heart transplant in a 31-years old male with non-ischemic dilated cardiomyopathy, class IV NYHA heart failure. Both procedures were guided by experienced surgeons, either from the other transplant centre from our country or from a nearby country (Czech Republic, Hungary), the overall management was according to the current standardised protocol.

ID609 Standard Case, Atypical Solution - Case Report

Horațiu Moldovan[1,2,3,4,5], Andrada Bogdan[4], Rodica Niculescu[4], Elena Nechifor[4], Florentina Matache[4], Silvia Preda[1,2], Aida Badea[1,2], Vlad Anton Iliescu[1,6]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Emergency Clinical Hospital Bucharest, Bucharest, Romania*
[3]*Romanian Academy of Medical Sciences, Bucharest, Romania*
[4]*Sanador Clinical Hospital, Bucharest, Romania*
[5]*Politehnica University, Bucharest, Romania*
[6]*"Prof. Dr. C.C. Iliescu" Emergency Institute for Cardiovascular Diseases, Bucharest, Romania*

Background: Tricuspid valve replacement (TVR) patients are often complex, thus making redo surgery for valve failure challenging. Currently, there are no published outcomes of redo-TVR, but overall early mortality of such a procedure is reported to be 37%. Off-label use of transcatheter aortic valve prostheses for tricuspid valve –in – valve implantation within dysfunctional surgical tricuspid valve bioprosthesis has been reported.

Methods: We present a case of 64 yo female with surgical history of right ventricle myxoma excision in 2007 and TVR with a biological prosthesis for residual TR in 2013. Postoperative she had grade III AV block with VVI pacemaker implantation;. Then a VVI pacemaker dysfunction followed with a DDD upgrade in 2016. Also known with autoimune hepatitis diagnosed in 2012.

At admission she was diagnosed with degenerative tricuspid valve biological prosthesis with severe stenosis and regurgitation from 2019, in NYHA III heart failure and hepatic failure with cronic elevated hepatic enzymes.

Treatment options for her were re-redo cardiac surgery vs. transcatheter out-of-lable percutaneous therapy. The patient was deemed as high risk for a re-redo cardiac surgery and our Heart Team rendered TAVI valve-in-valve in tricuspid position as a possible solution for such case.

Results: We had good procedural result, with no PVL and a mean gradient of 2 mmHg .After a normal recovery and functional status; she was discharged on day 4 post-procedure.

At 1 month follow-up she was in good clinical state with reduced heart failure symptoms. Also a decrease of NT-pro-BNP values, and hepatic markers was observed.

Conclusions: TVIV with commercially available transcatheter prostheses is already proven to be technically and clinically successful. The procedure has been proven to improve the clinical outcome for patients in NYHA III or IV heart failure. Moreover, TVIV should be considered a viable option for treatment of failing TV bioprosthesis.

ID611 History of Cardiovascular Surgery in Romania

Horatiu Moldovan[1,2,3,4,5]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Emergency Clinical Hospital Bucharest, Bucharest*
[3]*Romanian Academy of Medical Sciences, Bucharest, Romania*
[4]*Sanador Clinical Hospital, Bucharest, Romania*
[5]*Politehnica University, Bucharest, Romania*

Since the first surgical cardiac intervention done by Nicolae Hortolomei in 1953 (Digital Mitral Commissurotomy), Cardiac Surgery in Romania advanced impressively, both in terms of constantly evolving operative techniques and improving outcomes..

In Romania, the major surgical pioneers of the time were Voinea Marinescu, Dan Setlacec (both performed the first open-heart surgery at Fundeni Clinical Institute), Marian Ionescu (inventor of the Ionescu-Shiley percardial xenograft –ISPX- valve), Ioan Pop de Popa, Dan Fagarasanu and Vasile Candea. Them followed Radu Deac, Serban Bradisteanu, Vlad Iliescu, Mircea Barsan, Adrian Molnar, Grigore Tinica, Marian Gaspar, all deserving, as well, special recognition for their innovation and technical skills.

Nowadays Cardiovascular surgery encompasses the following five pillars: Classic Open-Heart Surgery, Minimally Invasive Cardiac Surgery, Endovascular Surgery, Hybrid Cardiovascular Procedures, Heart Transplant and Mechanical Circulatory Assist Devices.

ID613 Video-assisted Thoracoscopic Surgery for Postoperative Hemothorax in Cardiac Surgery

Reza Nayyerani[1], Roxana Carmen Geană Cibotari[1], Diana Sorostinean Cibotari[1], Elisaveta Cibotari[2], Pălărie Taina Alexandra[2], Wonah-Liciu Andreea[2], Victor Ștefănița Vladu[1], Ovidiu Știru[1,2], Vlad Anton Iliescu[1,2]

[1]"Carol Davila" University of Medicine and Pharmacy Bucharest, Bucharest, Romania
[2]"Prof. Dr. C.C. Iliescu" Emergency Institute for Cardiovascular Diseases, Bucharest, Romania

Background and Aim: Postoperative isolated hemothorax in cardiac surgery is a rare complication and may develop due to direct vascular damage, increased postoperative bleeding or thoracocentesis for pleural effusion. Coagulation disorders and limited respiratory rehabilitation are predisposing factors for this pathology. In the management of hemothorax, the first approach is non-operative, using tube thoracostomy, but in selected cases, a surgical intervention is needed due to persistent bleeding, retained hemothorax, or complications such as pleural empyema and entrapped lung. Minimally invasive options include video-assisted thoracoscopic surgery(VATS). The patients qualifying for VATS have stable hemodynamic conditions, healed wounds and stable sternums. The aim of the study is to present the role of VATS in evacuation of postoperative hemothorax in cardiac surgery.

Methods: We present the case of a 53-year old, male patient, obese, active smoker and with type II diabetes, who underwent an aortic valve replacement via ministernotomy. Initial postoperative evolution was favourable, but in the 7th postoperative day, a decrease of hemoglobine was noticed and subsequent X-ray examinations showed an increasing pleural effusion. A chest tube was inserted with initial evacuation of 1000 ml non-coagulable blood with improvement of the clinical and paraclinical status, but subsequent imagistic investigations (X-rays, ECO and CT) still showed pleural effusion. We decided to perform an assisted VATS which allowed complete evacuation of the hemothorax and achieving hemostasis.

Results: VATS presents diagnostic and therapeutical indications for retained hemothorax, especially in patients with high perioperative risk and late postoperative period with massive adhesions. VATS conduct to an early diagnosis, allows total clots removal and better placement of drainage tubes.

Conclusions: Nowadays, cardio-thoracic surgery is moving towards minimally invasive interventions. The advantages of VATS are reduced postoperative pain, less mortality, better lung function, earlier recovery, shorter hospitalization and lower costs.

THE WINNERS OF THE YOUNG INVESTIGATORS' AWARD COMPETITION

YOUNG INVESTIGATORS' AWARD – MEDICAL SPECIALITIES

ID538 The heart-kidney interplay in heart failure patients and its role in all-cause long-term mortality prediction

Diana Andreea Ionescu, Caterina Delcea, Catalin Adrian Buzea, Ancuta Vijan, Ruxandra Martin, Elisabeta Badila, Gheorghe-Andrei Dan

YOUNG INVESTIGATORS' AWARD – SURGICAL SPECIALITIES

ID430 A new therapy for infected MDR wounds using IgYy

Andrei Marin, Mirela Tene, Anca Nicolescu, Elena Burlacu, Carmen Giuglea

YOUNG INVESTIGATORS' AWARD – PHARMACY

ID437 Solid-state characterization of cyclodextrin-ticagrelor complexes obtained by different methods

Loredana-Maria Marin, Doina Draganesc, Iulian Sarbu, Emma Ozon, Marcin Skotnicki, Janina Lulek

YOUNG INVESTIGATORS' AWARD – DENTAL MEDICINE

ID568 CBCT assessment of the Greater Palatine Canal

Razvan-Costin Tudose, Radu Theodor Vlad, Mugurel Constantin Rusu

YOUNG INVESTIGATORS' AWARD – PRECLINICAL SPECIALITIES

ID481 3D Reconstruction of Tissues from Serial 2D Histology Slides

Victor Gabriel Ungureanu, Daniel Anghel, Elisa Anamaria Liehn, Octavian Bucur

ID435 Imaging Characteristics and Outcome of Pulmonary Embolism in Patients with COVID-19

Iulia Tatiana Lupascu[1], Costin Aurelian Minoiu[2], Bogdan Valeriu Popa[2], Mihaela Hostiuc[2]

[1]Emergency Clinic Hospital, Bucharest, Romania
[2]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objectives: The purpose of this study is to underline the differences between pulmonary embolism in Covid-19 patients versus non-Covid-19 patients in terms of imaging characteristics and outcome.

Methods: We conducted a retrospective study on two groups confirmed with pulmonary embolism using CT pulmonary angiography, consisting of 65 Covid patients and 65 non-Covid patients, admitted to the hospital during March 2020-February 2022. Data was entered in Microsoft Excel and analyzed using SPSS.

Results: The Covid patients group included 51% women and 49% men, the mean age was 67 years. The non-Covid patients group included 53% men and 47% women, the mean age was 63 years. Dyspnea, fatigue, cough, chest pain were the most common symptoms among Covid patients, while dyspnea, chest pain and deep venous thrombosis were the most common among non Covid patients. Radiologically, in 43% of Covid patients pulmonary embolism occured in segmentary and subsegmentary branches and 57% in central branches, while non-Covid patients showed peripheral pulmonary embolism in 28% of cases and central localization in 72% of cases. Fourteen percent of Covid patients showed crazy paving pattern and no reverse halo sign has been identified in our group. Seventy-four percent of Covid patients were admitted to medical ward and 26% to intensive care unit, compared to non-Covid group with 92% admission to medical ward and 8% to intensive care unit. Total thrombus load assessed via Qanadli score was lower in Covid patients (8%, SD 6%) compared to non-Covid patients (11%, SD 7%). Mortality rate in Covid patients was 10% while in non-Covid patients was 3%.

Conclusions: Pulmonary embolism in Covid patients involves more frequently smaller pulmonary arteries and is less associated with deep vein thrombosis. The higher mortality in Covid patients with pulmonary embolism suggests that pulmonary embolism contributes to mortality and morbidity in patients with Covid-19.

ID503 Long-term Efficay of Bosentan, an Endothelin Receptor Antagonist, in the Prevention of Digital Ulcers in Patients with Systemic Sclerosis-the Experien - the Experience of a Prescribing Center from Bucharest, Romania

Cristina Andreea Vrancianu[1,2], Iuliana Conea[2], Mihai Bojinca[1,2], Ioan Ancuta[1,2], Ana Maria Gheorghiu[1,2]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Internal Medicine and Rheumatology Department, Clinical Hospital "Dr. Ion Cantacuzino", Bucharest, Romania

Objectives: Peripheral vasculopathy is a severe complication of systemic sclerosis (SSc) manifested through digital ulcerations (DUs) that can lead to gangrene or amputations with significant impact on quality of life. Bosentan, an antagonist of endothelin receptor-1 with proven efficacy in preventing new onset of DUs in patients with SSc, was first introduced in Romania in 2014. Our objective was to evaluate the efficacy and long-term safety of bosentan in SSc patients in a prescribing centre in Bucharest.

Methods: We included 49 patients with SSc (39 women, with a median (IQR) duration of follow-up of 25 (43) months), evaluated in our clinic between November 2014 and March 2021, who presented with DUs on admission or in the preceding three months. We compared clinical and laboratory data, including the number of DUs, Visual Analogue Scale (VAS) for Raynaud's phenomenon and DUs, Health Assessment Questionnaire disease index (HAQ) at baseline and follow-up.

Results: At the initiation of treatment, patients presented a median (IQR) of 4 (4) DUs, VAS Raynaud 8 (2), VAS DUs 9 (3), HAQ 1.75 (1), with a significant reduction at 12 months of the number of DUs to DUs 0 (0), VAS Raynaud 2 (2.9), VAS DUs 0.5 (1.75) and HAQ 0.88 (1.13), with a maintained efficacy for DUs, VAS Raynaud and VAS DUs for the entire follow-up period. There were 8 (16.3%) cases of hepatic cytolysis 3 - 6 times the upper normal limit which required discontinuation of treatment, but otherwise no severe reactions.

Conclusions: Bosentan is a long-term effective treatment in reducing the number of new DUs and improving hands function and vasculopathy-related quality of life and is generally well tolerated and safe.

ID515 The Association Between Adiponectin and Fecal Calprotectin in IBD Patients

Iulia Soare[1], Anca Sirbu[1,2], Mircea Diculescu[1,4], Bogdan Mateescu[1,3], Cristian Tieranu[1,2], Sorina Martin[1,2], Carmen Barbu[1,2], Simona Fica[1,2]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Elias Emergency University Hospital, Bucharest, Romania*
[3]*Colentina Clinical Hospital, Bucharest, Romania*
[4]*Department of Gastroenterology and Hepatology, Fundeni Clinical Institute, Bucharest, Romania*

Objectives: 15-40% of IBD patients are obese, contrary to conventional belief. Obesity, visceral adipose tissue (VAT) and adiponectin have been linked to active stage in other chronic inflammatory diseases. The aim of the study is to assess the prevalence of obesity in IBD the impact of adiponectin and VAT on fecal calprotectin (FC) and disease activity.

Methods: Anthropometric data were collected, and all patients underwent adiponectin measurement. VAT was determined using dual-energy X-ray assessment (DXA) whole body. The patients' recent FC was documented. Disease activity was appreciated using the Harvey-Bradshaw Index (HBI) for Crohn's disease CD and the Partial Mayo Scoring Index for ulcerative colitis (UC).

Results: We conducted a multicentric cross-sectional study, including three tertiary centers, on 84 IBD adult patients. 50 patients with CD and 34 with UC, median age 43 years (IQR 23), were enrolled in the study. Their median BMI was 24.4 (7.5) kg/m2, range 12.4-41.3 kg/ m2. Out of them, 39.3% had a BMI >25 kg/m2, 22.6% overweight and 16.6% obese patients. Only 2% of them were underweight. Active disease was present in 39 patients (46.4%). There were no significant differences in VAT, BMI, or adiponectin between patients with active disease versus remission. Adiponectin showed a negative correlation with (VAT) ($r = -0.4$, $p = 0.01$) and positive with calprotectin in IBD active disease ($r = -0.418$, $p = 0.01$). Linear regression showed adiponectin ($\beta=0.8$, $p=0.02$) as an independent factor for FC in IBD patients, in an analysis that included VAT, BMI >25 kg/m2, gender, and age.

Conclusion: Obesity is a common complication in IBD. A positive and independent correlation between serum adiponectin and FC was found in IBD patients. This could represent an important new marker for the active phase of the disease.

ID528 Stroke in Geriatric Population - Prevalence, Risk Factors, Consequences in Cognition, Mood Disorders and Functionality

Valeria Madalina Alecu-Mihai[1], Mihaela Roman[2], Costina Daniela Gîță[1,2], Sorina Maria Aurelian[1,2], Ruxandra Mihalache[1,2], Ana Capisizu[1,2], Andreea Zamfirescu[1,2], Gelu Onose[1,3]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Geriatrics and Gerontology Clinic, "Sf. Luca" Hospital for Chronic Diseases, Bucharest Romania*
[3]*Neuromuscular Rehabilitation Clinic Division, "Bagdasar-Arseni" Emergency Hospital, Bucharest, Romania*

Objectives: Stroke is a disease of demographic aging. Our aim is to define the profile of post-stroke geriatric patient, analyze cardiovascular risk factors, measure neurocognitive and depressive disorders as well as the level of functionality/dependency.

Methods: retrospective study (1/07/2021-30/06/2022), 85 subacute/subchronic/chronic sequelae stroke patients hospitalized in a geriatric ward. Variables analyzed: age, sex, environment, ischemic/hemoragic stroke, motor deficit, neurocognitive disorder, Daily-Life-Activities-Scale(ADL), Instrumental-Daily-Life-Activities(IADL), BMI, modified Rankin Scale(mRS), Reisberg-scale, Hachinski score, Mini-Mental-Scale-Examination(MMSE), GDS-Yesavage, Clock-Drowing-Test-Sunderland, carotid-atherosclerosis, hypertension, dyslipidemia, diabetes, smoking.

Results: mean age 78.06[60,91] (SD 7.858); 44.7% - elderly pacients (75-84 years), 27.1% (65-74) young elderly, 57.6% females; 69.4% urban environment. The majority of these pacients- 94.1% had ischemic stroke, leading to 58.8% hemiparetic pacients. The motor deficit is caracterized by different grades of disability suggesting that 26.2% manifested 5 points on mRS scale, indicating total functional dependency. Additional to disability and motor deficit, 45.9% presented depression, mean 6.95 [2,30](SD 4.024), and is correlated to the degree of ADL functionality with statistical significance ($p = 0.002$) and with IADL ($p=0.001$). Also, neurocognitive imparment is present in 67.1% of pacients mean MMSE: 21.76[2,30] (SD 6.440). We observed that the grades of motor deficit is statistically significantly correlated with the severity of depression ($p=0.016$). The degree of neurocognitive disorder correlates statistically significantly ($p = 0.006$) with the degree of ADL functionality and by default with the degree of IADL ($p=0.081$). The presence of depression correlates with neurocognitive disorder with statistical significance ($p = 0.012$).

Conclusion: The statistically significance results obtained by correlations between functionality, cognitive, mood and motor level, emphasizes the importance of evaluation of these items in the poststroke elderly patients. It also gives a perspective of studies in these patients, a possible starting point for focusing on the benefits of new neurorehabilitation techniques.

ID538 The Heart-kidney Interplay in Heart Failure Patients and its Role in All-cause Long-term Mortality Prediction

Diana Andreea Ionescu[1], Caterina Delcea[1], Catalin Adrian Buzea[1], Ancuta Vijan[1], Ruxandra Martin[1], Elisabeta Badila[1], Gheorghe-Andrei Dan[1]

[1]*Clinical Hospital Colentina, Bucharest, Romania*

Objective: We aimed to investigate the heart-kidney interaction in hospitalized heart failure (HF) patients and its impact on long-term all-cause mortality, stratified by the estimated glomerular filtration rate (eGFR), given the interdependence involved in the cardiorenal syndrome.

Material and Methods: HF patients admitted consecutively to our Cardiology Departement from 2011 to 2014 were retrospectively included in the cohort. Patients with in-hospital mortality, or incomplete data, as well as readmissions, were excluded.

All-cause mortality was assessed in June 2020 after a median follow-up of 96 months.

eGFR was calculated using the CKD-EPI formula.

Results: The study sample included 1262 patients with a mean age of 72.21 ± 10.47 years. 52.06% were females. During the follow-up period, 44.36% patients died.

Mean left ventricular ejection fraction was 42.79 ± 12.14 %.

NT-proBNP values were inversely proportional to eGFR: increasing from 800.15 [IQR 344 – 1699] pg/ml in patients with a GFR > 90 ml/min/1.73m^2, to 1235 [IQR 481.2 – 2703] pg/ml in patients with eGFR between 60 – 90 ml/min/1.73m^2, to 1429 [IQR 606.67 – 4074.5] pg/ml in those with eGFR between 45 – 60 ml/min/1.73m^2, to 1784 [IQR 824.37 – 4278.5] pg/ml in those with eGFR between 30 – 45 ml/min/1.73m^2, to 4174 [IQR 1203.45 – 8477.5] pg/ml in those with eGFR between 15 – 30 ml/min/1.73m^2, to 10776 [IQR 1574.83 – 16873.5] pg/ml in those with eGFR < 15 ml/min/1.73m^2, p for trend < 0.001.

In multivariable analysis eGFR (p=0.001) and NT-proBNP (p<0.001) were independent predictors of mortality. However, in patients with eGFR < 30 ml/min/1.73m^2, NT-proBNP (p=0.137) was no longer predictive for long-term all-cause mortality.

Conclusion: In HF patients NT-proBNP and eGFR were independent predictors of mortality. However, NT-proBNP was not predictive for mortality in patients with eGFR<30 ml/min/1.73m^2.

ID610 Bacterial Infections in Severe Burn Patients a Prospective Study in a Burn-Dedicated Intensive Care Unit, Bucharest 2018-2022

Bogdan Nitescu[1,3], Daniela Pitigoi[1,2], Daniela Talapan[1,2], Maria Nitescu[1,2], Sorin Stefan Arama[1,2], Bogdan Pavel[1,3], Adrian Streinu-Cercel[1,2], Alexandru Rafila[1,2], Victoria Arama[1,2]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*

[2]*"Prof. Dr. Matei Bals" National Institute for Infectious Diseases, Bucharest, Romania*

[3]*Emergency Clinical Hospital of Reparatory Plastic Surgery and Burns, Bucharest, Romania*

Objectives: Bacterial infections are very common in severe burn wounds. Our objective was to identify the bacterial profile in severe burn patients in Romania.

Materials and Methods: We conducted a prospective descriptive study that includes patients admitted to the intensive care unit of the Clinical Emergency Hospital of Plastic, Reconstructive Surgery and Burns, Bucharest, Romania , (the only plastic-surgery dedicated hospital in Romania) from 1st October 2018 - 1st April 2022.

The admission criteria were Total Body Surface Area (TBSA) >20% of minimum 2A degree burns and/or inhalation injury regardless of the TBSA. The exclusion criteria were represented by less than 4 days of hospital stay and/or association of severe immunodeficiency or severe pathologies. We gathered burn wound swabs at admission and repeated them twice a week (Monday and Thursday). Culture isolets were cultivated in non-selective and selective media, then they are incubated at 37 degrees Celsius.

Results: A total of 202 patiens met the criteria and were included in the study , most of them being male subjects (132 /65.35%) .The mean TBSA was 35.5%, with a maximum of 95%. The mean TBSA of the survival group was 31% compared to the non-survival group which was 38.2%.

The majority of the subjects (200) had a colonization or a bacterial infection. A total of 387 unique positive burn wound swabs were identified. The most frequent bacterial agents included Pseudomonas aeruginosa (42,6%), Staphyloccocus Aureus (14%) and Klebsiella spp. (10,1%). Other bacterial agents identified were Acinetobacter spp., Enterobacter spp. and Proteus spp (with a maximum of 8%).

Conclusions: Pseudomonas aeruginosa, Staphyloccous Aureus and Klebisella spp. are the most frequent agents found in burn wounds and remain our main concern in treating post-burn infections, due to their high drug-resistance profiles. The results of our study could guide the plastic surgery and intensive-care units practice, in order to better understand and aim the treatment against specific microbial agents in burn care.

SURGICAL SPECIALITIES

ID430 A New Therapy for Infected MDR Wounds Using IgY

Andrei Marin[1,2], Mirela Tene[2], Anca Nicolescu, Elena Burlacu[2], Carmen Giuglea[1,2]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*"Sf. Ioan" Emergency Clinical Hospital, Bucharest, Romania*

Objective: IgY is a novel technology that uses immunized birds with specific bacteria to obtain specific monoclonal and polyclonal immunoglobulin. The IgY can be used in different fields – in cosmetology, nutrition as well as in the medical domains. The current presentation is focused on showing the positive results of using IgY for treating wounds with multi drug resistant bacteria.

Method: We present a series of 7 cases – patients aged between 63 and 87 years old, suffering from different skin pathologies (chronic ulcers of the inferior limb, abscess of the thigh, diabetic foot, wound dehiscence after abdominoplasty, chronic pressure sores and dehiscence on an amputated limb). All cases had a documented MDR bacteria present in the wound. In the cases of infection of the lower limb - amputation was sometimes recommended. The patients were treated using cream/gel with IgY immunoblobulin for the local infection and serial necrosis debridement.

Results: All patients presented sterile cultures soon after the initiation of treatment with IgY. The gel was also useful to prevent other wound infections until wound epithelization. No other antibiotics were needed after using the IgY formula. Epithelization occurred in 6/7 patients between 16 days and 4 months (depending on the size of the defect) and last patient is continuing his treatment to achieve wound closure.

Conclusions: The IgY immunoglobulin represent an innovative solution for MDR bacteria. The cream/gel used locally acts as an effective bactericidal treatment that promotes wound healing by epithelisation. It can be particularly useful for infected lesions where antibiotics have little or no effect.

ID494 The Prevalence, Risk Factors and Management of Dysmenorrhea Among Medical Students

Mihaela Amza[1,2,3], Romina-Marina Sima[1,2,3], Mihai-Daniel Dinu[1], Liana Ples[1,2,3]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*"Sf. Ioan" Clinical Emergency Hospital, Bucharest, Romania*
[3]*Bucur Maternity, Bucharest, Romania*

Objectives: The purposes of this study were to determine the prevalence of dysmenorrhea and to examine the factors that contribute to its occurrence among medical students. We also analyzed the management of menstrual pain within the study group.

Methods: The study is prospective, analytical and observational and included students from five medical university centers of Romania. Our original questionnaire consisting of 59 questions helped us to collect data about the medical history and lifestyles of the students and also about menstrual cycles. A p value less than 0.05 represents the limit of significance.

Results: A total number of 1720 female medical students were included in our study and dysmenorrhea was present in 78.4% of participants. Menstrual pain was associated with the duration of menstruation, the degree of bleeding, the presence of premenstrual syndrome and a family history of dysmenorrhea ($p = 0.000$), a lack of regular physical activity ($p = 0.016$), a lifestyle without healthy nutrition ($p = 0.038$), regular coffee consumption ($p = 0.003$) or an active sex life ($p = 0.000$). The non-steroidal anti-inflammatory drugs represent the most used drug and are used by 741 students (54.9%). A statistically significant difference ($p = 0.000$) was observed between the intensity of pain if no medication was administered and the intensity of pain if medication was administered early enough before menstruation.

Conclusions: Dysmenorrhea has a high prevalence among female medical students. Its presence is associated with a lot of risk factors. The management of menstrual pain is a real challenge for medical students and we need to give more attention on this issue.

ID527 Comparison of Different Nerve Defect Repair Methods

Andrei Marin[1,2], Mirela Tene[2], Elena Burlacu[2], Carmen Giuglea[1,2]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]"Sf. Ioan" Clinical Emergency Hospital, Bucharest, Romania

Objective: This experimental study was performed to assess different types of nerve defect repair on rat sciatic nerve. The 4 methods used were: autograft, rat aorta used as nerve conduit, rat aorta filled with platelet rich plasma - PRP and rat aorta filled with stem cells.

Method: 40 Wistar rats were included in the study, divided into 4 groups. Each rat was operated on the right sciatic nerve, where a defect of 0,5cm defect was performed. 2 rats were sacrificed for aorta harvesting and to obtain PRP solution. The defect was bridged using one of the 4 methods of repair. All rats were monitored for 12 weeks postoperatively. Clinical assessment of the recovery was done every other week by using a motor test, a sensitivity test and a footprint test. At 12 weeks all rats were evaluated via MRI at the level of the calf muscle (when a right/left diameter ratio was calculated). The rat were then euthanatized and the sciatic nerves were harvested for histopathology examination and the gastrocnemius muscle were excised and weighed. The gastrocnemius index (ratio between the weights of the right/left gastrocnemius muscles) was calculated for each rat in the study.

Results: There were 2 rats excluded from the study in the autograft batch – one due to postoperative death, the other due to nerve rupture. The results showed good nerve regeneration in terms of sensitivity and mobility, slightly better in the PRP and stem cell batches. The clinical results correlated with the final results at 12 weeks (MRI scan, gastrocnemius index and histology assessment), with the best results in the PRP group.

Conclusions: While a nerve graft is a suitable solution for nerve defect, a nerve conduit filled with PRP/stem cells might achieve similar or even better results.

ID589 Artificial Intelligence Program Capable of Identifying Flaps on Thermographic Images

Răzvan Danciu[1], Laura Raducu[1,2], Radu Cristian Jecan[1,2]

[1]Emergency Hospital Prof. Dr. Agrippa Ionescu, Bucharest, Romania
[2]Plastic Surgery Dept., "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objectives: The objective of the study is to develop a program capable of identifying flaps on thermographic pictures. Once identified, we can study their temperature and thus identify a possible complication, being extremely useful in postoperative flap monitoring.

Methods: To create this algorithm, we used photographs obtained from 20 patients who underwent a local or pedicled flap to cover a defect resulting from an excision of a tumor formation. Data processing involves two stages, one of medical interpretation of the pictures in accordance with the clinical data, the evolution of the patient and the flap. The second consists in entering the data into a computer program capable of interpreting the data and obtaining new values based on artificial neural networks. We used an algorithm that uses convolutional neural networks, which are able to take the information from a picture that they divide up to the pixel level. Then, through the "pattern recognition" method, he succeeds in reconstructing the image, obtaining the image of the flap.

Results: After running the program, it produces a black-and-white matrix that corresponds to the flap area (which it considers to be a flap based on the learning process it was previously subjected to). After obtaining the matrix, the program can superimpose this matrix with the initial picture and thus give us access to every pixel of the area corresponding to the flap. The program can also identify the exact temperature of each pixel and thus produce a thermal map of the flap with impressive accuracy.

Conclusions: Using a medical tool (thermal chamber) and an efficient and fast program, we can obtain medically important results that can warn us of a tissue injury before it becomes clinically visible and so we can act promptly, reducing long-term complications of flaps.

PRECLINICAL SPECIALTIES

ID471 Simulation Based Peer-assisted Learning Romanian Medical Students' Perception

Didina-Catalina Barbalata[1,2], Alexandra Zait[1,2], Cristian Toma[1,2,3]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*Center of Innovation and e-Health, Bucharest, Romania*
[3]*Hospital Professor Dr. Theodor Burghele, Bucharest, Romania*

Objectives: The aim of the study is to determine the perception of medical students towards simulation based peer-assisted learning (SB-PAL) and the students' evolution of confidence in clinic skills.

Methods: This cross-sectional study was conducted at the Department of Medical Simulation of the Center for Innovation and e-Health (CIeH), part of the University of Medicine and Pharmacy "Carol Davila" Bucharest, Romania, between March and December 2021. During this period, 2186 first year students have been part of a medical simulation workshop. Quantitative data was collected using a questionnaire and the responses were assessed on a five-point scale.

Results: The response rate for this study was 66,10% (n=1445). The confidence level of the students regarding clinical knowledge and skills increased with approximately 55% after taking part in the workshop. Overall, respondents were satisfied with teaching strategy, use of mannequins and workshop organisation. 99,31% of the respondents found SB-PAL effective in developing practical clinical skills. 56,82% affirmed they would not bring changes to the workshop.

Conclusions: Most students gained confidence through simulation based peer-assisted learning and indicated high satisfaction after attending the workshop.

ID481 3D Reconstruction of Tissues from Serial 2D Histology Slides

Victor Gabriel Ungureanu[1,2], Daniel Anghel[2], Elisa Anamaria Liehn[2,3], Octavian Bucur[2,4]

[1]*"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania*
[2]*National Institute of Pathology Victor Babes, Bucharest, Romania*
[3]*University of Southern Denmark, Odense, Denmark*
[4]*Viron Molecular Medicine Institute, Boston, MA, USA*

Objective and Background: The standard approach to pathological investigation and diagnosis only uses conventional 2D microscopy of tissue slides, while excluding potentially important 3D molecular and spatial information. The aim of our study is to build 3D models of the tissues involved in order to study their molecular and cellular spatial properties, with applications in research and diagnostics.

Methods: Whole slide images of 30 normal colon and 20 carotid artery consecutive tissue sections (2 and 4μm thickness respectively) were acquired using the Aperio LV1 scanner. Tissues were stained with either H&E (colon) or Trichrom-Orcein, anti-SMA and anti-Mac2 (smooth muscle actin and macrophage immunohistochemical markers) respectively (carotid artery). Their colour spaces were converted from RGB (Red Green Blue) to HSV (Hue Saturation Value). Denoising was performed using Gaussian blurring and K-means clustering. SLIC (Simple Linear Iterative Clustering) was applied simultaneously to all images belonging to the same specimen, producing an intermediate 3D model which was refined using the marching cubes algorithm.

Results: Our model is able to reconstruct in 3D the sequential 2D-sections. The model is also able to automatically segment in 3D the mucosal and connective tissues of the colon specimen and to detect and classify the endothelium, arterial laminae, fatty plaque and inflammatory tissue for the carotid artery, as well as quantifying cellular distribution from immunohistochemical markers. Compared to RGB, the HSV colour space is able to detect more subtle colour changes and results in a finer 3D reconstruction.

Discussion: Our protocol allows for multiple channels of data to be combined into one single representation. The final model can be used as input for more advanced machine/deep learning techniques, with state-of-the-art applications in advanced diagnostic pathology, treatment purposes and research while using minimal computational power. This work can lay the foundation for the 3D diagnosis in pathology.

ID546 Digital Pathology Procedure Applied on Holographic Microscopy Images of Adenomatous Polyps

Viorela Nicoleta Grigore[1], Mihaela G. Moisescu[1], Violeta L. Calin[1]

[1]Biophysics and Cell Biotechnology Dept., "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objectives: The success of diagnose and treatment of colorectal cancers relies on pathologist evaluation of tumour biopsy. The tissue sample preparation for microscopy analysis is time-consuming. When fast decision must be taken, digital holographic microscopy helps by enabling fast acquisition of quantitative phase images (QPIs) using unstained tissue samples. This study aims at illustrating that by processing QPIs one may differentiate benign from malign adenomatous polyps.

Methods: Acquired from unstained samples of adenomatous polyps, 51 QPIs (23 benign and 28 malign) were manually segmented using Fiji software. A total of 129 glands: 88 benign and 41 malign, were obtained. The regions of interest have been identified by overlapping the unstained slide with hematoxilin-eosine one. Further, 14 parameters of interest (categorised as shape and statistical parameters) were calculated on each gland. Mann-Whitney test was applied to evaluate the statistical significance of differences between benign and malign glands.

Results: Eight of the nine shape parameters were significant different in malign with respect to benign glands. Higher values of area, diameter, and shape descriptors (aspect ratio, fit ellipse) and lower values of circularity, roundness and solidity characterised malign glands.

Malignant polyp heterogeneity gave statistical higher values of media and median values of phase shift and lower kurtosis and variation coefficient (skewness was similar in both categories of glands).

Conclusions: Processing QPIs is a promising tool to obtain objective information on the characteristics of tissues and expand the digital pathology to an image category which contains valuable information (i.e., phase shift value in each pixel correlates directly to refractive index and protein content in that point). Each cancer type has different morphology, therefore it is expected that different parameters are needed to be computed, but colorectal cancer by gland deformities is a good subject to an image processing methodology of diagnosis.

ID581 Development, Optimization and Laboratory-validation of a Medium for Isolation and Screening of Carbapenemase-producing Enterobacterales

Edgar-Costin Chelaru[1,2], Andrei-Alexandru Muntean[1,2], Costin-Stefan Caracoti[1,2], Viorela-Ioana Nicolae[1,2], Bogdan-Florin Ciomaga[1,2], Crina Danaila[1,2], Madalina-Maria Muntean[1,2], Mircea Ioan Popa[1,2]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Cantacuzino National Military Medical Institute for Research and Development, Bucharest, Romania

Introduction: Antimicrobial resistance is a global public health problem. Carbapenems, last resort beta-lactam antibiotics, can be inactivated by carbapenemases. The genes that produce carbapenemases can be easily transmitted between microorganisms, as they are frequently found on mobile genetic structures, like plasmids. Given that patients with positive screening may develop clinically significant infections, it is important to identify colonizations early. Due to the need of increased hygiene-efforts, it is similarly important to distinguish between carbapenemase-producing Enterobacterales and those co-harboring other resistance mechanisms (co-production of chromosomal cephalosporinases, extended spectrum beta-lactamases and/or impermeability).

Objective: The aim of the study is obtaining a recipe for a selective-differential culture medium, with a chromogenic medium as base, infused with antimicrobial substances available in Romania, capable of isolating carbapenemase-producing Enterobacterales.

Method: The detection limits of carbapenemase-producing microorganisms are tested using 200 well-characterized beta-lactamase (including carbapenemases) producing strains. The ability of the strains to grow on the medium is tested, starting with 10 μL of 10^8 CFU/mL inoculum and proceeding with series dilutions (10^8 CFU/mL - 10^2 CFU/mL), in order to establish the detection limits for each strain (and various beta-lactamases). Also, comparative testing of infused substances concentrations (i.e. antibiotics, zinc) is performed, in order to determine the best sensitivity/specificity ratio.

Results: Use of oxacillin and ertapenem-infused medium showed inhibition of chromosomal cephalosporinases (AmpC), with good retrieval of even slow-hydrolysing carbapenems (OXA-48-like variants, i.e. OXA-181, OXA-244). Details of strain-enzymes pairs tested and details of sensitivity and specificity are presented herein.

Conclusion: A culture medium which can facilitate rapid identification in national laboratories, more accessible than an import one, obtained using resources available in Romania, can be beneficial in limiting dissemination of carbapenemase-producing Enterobacterales, taking necessary hygiene measures and avoiding inappropriate antibiotic treatments.

ID592 Imipenem-based Carbapenem Inactivation Method - a New Method for Detecting Enterobacterales Slow-hydrolyzing Carbapenemase-producers

Bogdan-Florin Ciomaga[1,2], Edgar-Costin Chelaru[1,2], Costin-Stefan Caracoti[1,2], Viorela-Ioana Nicolae[1,2], Ioana Popa[1,2], Lavinia-Emilia Petcu[1,2], Andrei-Alexandru Muntean[1,2], Mircea Ioan Popa[1,2], Gabriela Loredana Popa[1]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Cantacuzino National Military Medical Institute for Research and Development, Bucharest, Romania

Introduction: Several confirmatory methods exist that can detect potential carbapenemase-producing bacteria. However, some carbapenemases, particularly slow-hydrolyzing variants, often yield negative results on such tests, leading to some carbapenemase producers remaining undetected. As such, there is great interest in developing an easy to implement and interpret method that can detect such carbapenemase producers.

Aim: The aim of this study is to create an Imipenem-based Carbapenem Inactivation Method (CIMi) test that can correctly identify slow-hydrolyzing carbapenemases such as OXA-181, OXA-244 or OXA-23. Another goal would be to ensure that this test can be interpreted alongside other carbapenemase confirmatory tests, such as rCIM and mCIM.

Method: A selection of bacteria belonging to the Enterobacterales family, both with and without carbapenemase expression, were incubated along with imipenem disks in distilled water or tryptic soy broth tubes in accordance with rCIM protocol. Said imipenem disks were then recovered and placed upon a Mueller Hinton agar plate, which had been inoculated with an E. coli ATCC 25922 strain immediately prior. Carbapenemase-producing strains would break down the imipenem stored within the disk, leading to inhibition zone loss and a positive test, while strains with no carbapenemase would not significantly affect the disk's inhibition zone, thus yielding a negative test.

Results: CIMi is able to successfully identify carbapenemase-producing bacteria, with higher specificity than other confirmatory tests, such as CIM or mCIM. Furthermore, as testing tubes for CIMi are made using the same conditions found in rCIM, these two tests are compatible and can be done simultaneously, using the same testing tubes. Sensitivity, specificity, ROC analysis are presented herein.

Conclusions: The newly detailed protocol can be implemented by laboratories which want to refine their carbapenemase detection methods but do not require or do not want to implement the rapid growth monitorization of liquid-based E. coli.

ID606 Screening and Evaluation of Carbapenemase-producing Enterobacterales (CPEs) from a Tertiary Care Hospital

Costin-Stefan Caracoti[1,2], Viorela-Ioana Nicolae[1,2], Edgar-Costin Chelaru[1,2], Bogdan-Florin Ciomaga[1,2], Ana-Maria-Claudia Barbu[1], Andrei-Alexandru Muntean[1,2], Mircea-Ioan Popa[1,2]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania
[2]Cantacuzino National Military Medical Institute for Research and Development, Bucharest, Romania

Introduction: The threat of carbapenemase-producing Enterobacterales (CPEs) requires rapid identification of infected or carrier patients. It is thus necessary to have effective screening techniques.

While molecular methods are fast and accurate, their use in screening of patient carriage is limited due to cost, infrastructure and only identifying genes which are included in the test.

Aim: The aim of this study was to test the efficacy of a new chromogenic selective media developed by our team as well as to provide accurate and extensive information regarding the antibiotic resistance profiles of the strains isolated from the hospital.

Method: Strains isolated over the course of 2 years were identified by MALDI-TOF as Enterobacterales and screened using the disk diffusion method. The 200 bacterial isolates that passed the screening underwent the phenotypic rapid carbapenem inhibition method (rCIM) and then were stored in the ultrafreezer. We then tested the strains by inoculating them on our new selective media to see if it would correctly identify the carbapenemase producers.

Results: All the carbapenemase producing strains were correctly identified by the selective media. Some false positives occurred, usually related to other types of enzyme combinations that we will further discuss, case by case

Conclusion: Plasmids are usually the location of the genes encoding the most common carbapenemases, and can be transferred from strain to strain and even between species. It is therefore essential to identify strains containing these types of transferable mechanisms as fast as possible (right at admission to hospital care) due to the potential danger they pose as sources, reservoirs and vectors of carbapenemase genes.

PHARMACY

ID437 Solid-state Characterization of Cyclodextrin-ticagrelor Complexes Obtained by Different Methods

Loredana-Maria Marin[1], Doina Draganescu[1], Iulian Sarbu[1], Emma Ozon[1], Marcin Skotnicki[1], Janina Lulek[1]

[1]"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objectives: To analyze the solid-state (crystalline or amorphous) of ticagrelor (TICA) and its complexes with cyclodextrins (CDs), obtained by 3 different methods.

Method: The strategy chosen to improve the solubility TICA is the preparation of inclusion complexes (IC) with CDs. Complexes were prepared by 3 different methods: lyophilization (freeze-drying), co-precipitation and kneading, with 3 types of CDs: beta-cyclodextrin, hydroxypropyl-beta-cyclodextrin, methyl-beta-cyclodextrin. The analysis of the solid state were investigated by: thermogravimetric analysis (TGA), differential scanning calorimetry (DSC), X-ray powder diffractometry(XPRD).

Results: The DSC analysis of TICA revealed that it exists in the pure crystalline state. Different preparation methods of the complexes (TICA-CD) produced TICA in different solid state depending of the method of preparation. Based on the TGA results, it can be concluded that there are no chemical incompatibilities between ticagrelor and the CDs. Based on the DSC results, co-precipitation produced mainly crystalline sample, the kneading method produced amorphous material with some crystalline phase, similarly to freeze dried material. However, the freeze-dried material was almost fully amorphous in the case of the TICA complexes with hydroxypropyl-beta-cyclodextrin, methyl-beta-cyclodextrin. The results were confirmed by the XPRD analysis.

Conclusion: The lyophilization method is the most effective in term of obtaining ticagrelor in the amorphous state. Using the kneading technique, the complexes with lower crystallinity were obtained than ticagrelor by itself. In the mixtures obtained by co-precipitation nearly pure crystalline ticagrelor was detected, so it can be concluded that the method was not successful, probably because most of the cyclodextrins were filtered during the production process. The lyophilization methods appeared to be the most efficient process to obtain TICA- CD complexes in the amorphous state. Improvement of the co-precipitation method need to be implemented in order to obtain CD complexes with TICA. Different methods of precipitation and different filtration techniques will be considered.

ID472 Synthesys of Some New Pyridazines Derivatives With Potential Antitumoral Activity

Beatrice-Cristina Ivan[1], Florea Dumitrascu[2], Constantin Draghici[2], Camelia Mia Hotnog[3], Mirela Antonela Mihaila[3], Lorelei Irina Brasoveanu[3], Sergiu Shova[4], Stefania-Felicia Barbuceanu[1]

[1]Faculty of Pharmacy, Organic Chemistry Department, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

[2]"C. D. Nenitzescu" Institute of Organic Chemistry and Supramolecular Chemistry of the Romanian Academy, Bucharest, Romania

[3]"Stefan S. Nicolau" Institute of Virology, Center of Immunology of the Romanian Academy, Bucharest, Romania

[4]"Petru Poni" Institute of Macromolecular Chemistry, Laboratory of Inorganic Polymers, Iasi, Romania

Purpose: Numerous heterocyclic compounds with pyrrole or pyridazine ring are reported to possess various biological activities, including antitumor, antimicrobial, analgesic, anti-inflammatory [1,2]. The condensed heterocyclic compounds containing both pyrrole and pyridazine rings, pyrrolo[1,2-b]pyridazines, are also interesting scaffold with biological potential including antitumoral activity [3]. The aim of this study was to synthesize new compounds from pyrrolo[1,2-b] pyridazine class and to evaluate their antitumoral activity by the synergic effect of those two heterocyclic rings.

Material and Methods: The pyridazine ester intermediate has been obtained starting from benzene and succinic anhydride, through a multi-steps synthesis. The new precursor acid was obtained by hydrolysis of the ester. The new pyrrolo[1,2-b]pyridazine was synthesized by reaction of acid with methyl propiolate in acetic anhydride at 90 °C. The new compounds were characterized by spectral techniques (IR and NMR spectra) and by X-ray analysis. The antitumoral activity of new acid and pyrrolo[1,2-b]pyridazine was evaluated on LoVo, MCF-7, SK-OV-3 tumor cell lines and on a normal HUVEC cell line using the MTS assay. The cell lines were treated for 24 h and 48 h with scalar concentrations (6.25 to 400 μM) of the above compounds.

Results: The new 2-(6-oxo-3-phenylpyridazin-1-yl)butanoic acid and methyl 7-ethyl-2-phenyl-pyrrolo [1,2-b]pyridazine-5-carboxylate were synthesized in moderate yields. Compound-induced cytotoxicity assays demonstrated that pyrrolo [1,2-b] pyridazine has a better activity compared to the precursor acid, the lowest viability being time- and dose-dependent induced in LoVo cell line. The viability of normal cells was not significantly affected by these compounds. However, this new condensed heterocycle has a weaker effect compared to 5-fluorouracyl drug-reference.

Conclusions: In this study, we synthesized two new compounds having a pyridazine core. The evaluation of the antitumoral potential indicates that the pyrrolo[1,2-b]pyridazine had the best activity on the LoVo cell line, and might be considered as a promising candidate for the next development.

DENTAL MEDICINE

ID568 CBCT Assessment of the Greater Palatine Canal

Tudose Razvan-Costin[1], Vlad Radu Theodor[1], Rusu Mugurel Constantin[1]

[1]Faculty of Dental Medicine,"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objectives: The Greater Palatine Canal (GPC) represents an anatomical structure of great importance in dentistry as it establishes communication between the oral cavity and the Pterygopalatine Fossa (PPF). A point-by-point study was developed in pursuance of an utter apprehension of the GPC, its topography, dimensions, and its interrelations with the lateral aspects.

Materials and methods: Cone-Beam Computed Tomography (CBCT) technology was used to measure the accurate dimensions and angles. 50 CBCT cases were thoroughly analyzed, adding up to the review of 100 GPCs. 4 figures were determined, with a view to the angulation both in coronal and sagittal planes, the anterior-posterior length as viewed in the axial plane, and the anatomical aspects encountered in the lateral verge of the Greater Palatine Foramen (GPF). Planmeca Romexis software was utilized to scrutinize each case. We rigorously positioned each figure in all 3 planes to obtain the most precise view of the investigated structure.

Results: Great variations of these determinations were encountered in the study, ranging from -21 to 15 degrees in coronal plane angulation, 11 to 41 degrees in the sagittal plane, 1,68 to 4,7 mm in AP length, and type 0 to type 3 in angulation adjustment. As regards the structures identified on the lateral aspect of the GPF, we have encountered 2nd molars, erupted and included 3rd molars, maxillary sinuses, and edentulous alveolar processes.

Conclusion: It should be acknowledged that not only the canal itself suffers various irregularities, but also the surrounding structures and their interrelations with the GPC. A medical, or surgical procedure should be performed being mindful of the potential anatomical aspects in proximity. An intervention in the area of the GPC may shatter not only the maxillary sinus but may also injure the nasal fossa, the alveolar process, included or even erupted molars.

ID561 Oral Leukoplakia. A 7 year Follow-up study

Serban Andrei-Eduard[1]

[1]Faculty of Dental Medicine,"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Oral leukoplakia (OLK) is "A predominantly white plaque of questionable risk having excluded (other) known diseases or disorders that carry no increased risk for cancer" defined by the WHO Collaborating Centre for Oral Cancer.[1]

Objective: To assess the evolution of OLK lesions in 20 patients, 7 years or more prior to diagnosis.

Materials and methods: A cohort of 20 patients with clinical diagnosis of OLK whom we examined with a mean follow-up time of 7 or more years. We recorded their tobacco smoking habits and the clinical features of the lesion, either Homogenous or non-homogenous. We also noted the localization of the lesions and number of lesions, either single or multiple lesions and also treatment if any.

Results: The most lesions were located on the floor of the mouth, gingiva and oral mucosa. Most lesions were single lesions, and most homogenous aspect. Of the tobacco smokers, 8 quit during follow-up and 8 had not. For all of those who stopped smoking, lesions were ameliorated to almost gone, while for the still smoking group OLK was the same for half of them. No malignant transformation was encountered.

Conclusions: Quitting smoke is a good predictor for good evolution of the lesions although it does not mean that they are safe from malignant transformation in the future. Regular follow-ups are required for all patients to ensure the safety and evolution of OLK.

[1]Warnakulasuriya, Saman et al. "Oral potentially malignant disorders: A consensus report from an international seminar on nomenclature and classification, convened by the WHO Collaborating Centre for Oral Cancer." Oral diseases vol. 27,8 (2021): 1862-1880. doi:10.1111/odi.13704

ID572 The Effect of Burning Mouth Syndrome on Patients' Oral Health-related Quality of Life

Raluca Ema Pirvu[1], Carmen Nicolae[1], Ioanina Parlatescu[1]

[1]Department of Oral Pathology, Faculty of Dental Medicine, „Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

Objective: to evaluate the intensity of pain and the oral health-related quality of life in burning mouth syndrome(BMS) using the visual analogue scale (VAS) and the Oral Health Impact Profile-14 (OHIP-14) test.

Material and methods: The demographic data, clinical features, systemic conditions, and paraclinical investigations of 23 BMS patients were collected. The Romanian version of OHIP-14 questionnaire was administred. OHIP-14 has a 5-point Likert-type response scale (0: never, 1: hardly ever, 2: occasionally, 3: fairly often, 4: very often). The non-parametric Kruskal-Wallis test was carried out to find if there was any significant difference in the OHIP scores between patients aged lower 51, between 62 and 65 and over 66 years.

Results: The age of patients ranged from 37-85 years; mean age being 58 years. Among them 86.9% (20) were females, and 13.1% (3) were males. The value of VAS ranged between 3 to 10, median 7, and OHIP-14 score ranged from 0 to 45, median of 18. The scores for the domains of physical discomfort and physical pain were highest whereas the lowest scores were observed in the physical disability and functional limitation. Regarding the items the highest score was found on pain and the lowest score on "totally unable to function" item. The p-value of Kruskal-Wallis test was 0.65776 indicating no significant differences in the OHIP-14 score between patients aged lower 51, between 62 and 65 and over 66 years old.

Conclusion: Burning mouth syndrome has a negative impact on the quality of life according to the OHIP-14 scores with no significant difference regarding the patient age.

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