



**ZILELE
UMFST 7-11
2020 DECEMBRIE**



**GEORGE EMIL PALADE UNIVERSITY OF MEDICINE, PHARMACY,
SCIENCE, AND TECHNOLOGY OF TARGU MURES
UNIVERSITY DAYS
DECEMBER 7 - 11, 2020, TARGU MURES**

BOOK OF ABSTRACTS

3/2020

**SCIENTIFIC SESSION OF UNIVERSITY ACADEMIC STAFF
THE 13TH CONFERENCE OF PHD. STUDENTS AND YOUNG DOCTORS**



**ISSN 2602-1609
ISSN-L 2602-1609**

BOOK of ABSTRACTS

No. 3/2020

**George Emil Palade University of Medicine, Pharmacy,
Science, and Technology of Targu Mures**

University Days

December 7-11, 2020, Targu Mures

**Scientific Session of University Academic Staff
The 13th Conference of PhD. Students and Young Doctors**

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ABSTRACT BOOK

Scientific Session of University Academic Staff Medicine and Pharmacy

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ABSTRACT BOOK

The 13th Conference of Ph.D. Students and Young Doctors December 8th, 2020

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**SCIENTIFIC SESSION OF UNIVERSITY ACADEMIC STAFF.
MEDICINE AND PHARMACY**

ANESTHESIOLOGY AND INTENSIVE CARE MEDICINE

INTRA-AORTIC BALLOON PUMP - OUTDATED OR STILL ON-TREND - THROUGH THE PRISM OF A CASE PRESENTATION.

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Background: The intra-aortic balloon pump decreases afterload, therefore left ventricular wall stress and myocardial oxygen demand, and increases coronary perfusion and myocardial oxygen supply, creating conditions for cardiac function recovery in ischemic heart diseases. The intra-aortic balloon pump (IABP) was first successfully used in 1967 for the treatment of patients with left ventricular dysfunction, but nowadays is somewhat marginalized because of the newer generations of cardiac output support devices (ECMO; Tandem-Heart, Impella). **Material and methods:** A 53-year-old patient was hospitalized with cardiogenic shock caused by acute myocardial infarction. After percutaneous angioplasty and stent implantation, he was transferred to the intensive care unit (ICU) for cardiac and respiratory support. **Results:** At the ICU the cardiac function was maintained with high doses of inotropic and vasoactive drugs, and an intra-aortic balloon pump. The ejection fraction progressively increased from 20% to 40%, therefore we could reduce the doses of inotropic drugs and vasoconstrictors and the patient could be weaned from IABP. Because of cardiogenic pulmonary edema, the patient was severely hypoxic (paO₂/FiO₂ <100), with an increased work of breathing, so mechanical ventilation was maintained for five days. After extubation, the patient still required non-invasive ventilation and alveolar recruitment for another 10 days. We observed no side effects caused by IABP. **Conclusions:** The intra-aortic balloon pump is a safe and efficient method supporting cardiac function especially in patients with myocardial ischemia and left ventricular failure.

Keywords: cardiogenic shock, intraaortic balloon pump, inotropic drugs, vasoconstrictors, myocardial infarction

UMFST COVID19 MEDICAL SUPPORT UNIT

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Background: The increasing number of COVID19 cases and implicitly the increase in the number of COVID19 critical patients has led to an increasing demand for intensive care units and intensive care beds. The University's reaction was to provide assistance to the Târgu Mureș Emergency County Clinical Hospital and the local authorities by providing the Multipurpose Room in order to transform it into a medical unit for COVID19 critical patients. **Material and methods:** This is a descriptive study of COVID19 patients admitted in UMFST COVID19 Medical Support Unit, between 1st of August and 10th of November 2020. The data we collected were patients' age, admission severity score APACHE II, the required type of oxygen therapy. **Results:** Between the specified period, there were 136 patients admitted. The mean age was 67.04 (SD=12.12). The average length of stay was 8.74 days (SD=6). The median for APACHE II score was 27 (IQR=19). A total of 62 patients (45.6 %) required mechanical ventilation, both invasive and non-invasive. **Conclusions:** UMFST COVID19 Medical Support Unit proved its usefulness as an emergency solution for the treatment of COVID19 critical patients.

Keywords: COVID19, intensive care, critical care

BIOCHEMISTRY

STUDY ON LABORATORY PARAMETERS IN HYPERTENSIVE PATIENTS WITH AND WITHOUT DIABETES MELLITUS

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Background: Hypertension and diabetes mellitus are frequent chronic diseases with cardiovascular complications. Laboratory investigations can evaluate the biochemical profile, including oxidative stress parameters. **Material and methods:** The aim of our study was to evaluate the relationship between routine biochemical parameters and markers of oxidative stress in hypertensive patients with/without diabetes mellitus, and to evaluate the gender distribution of protective factors against cardiovascular complications. Blood samples were collected from patients admitted to the Cardiovascular Rehabilitation Clinic in Tîrgu Mureş, routine biochemical parameters were measured on Konelab analyzer (serum glucose, lipid profile, minerals, kidney function tests, etc.). Oxidative stress parameters were processed on HPLC UV/VIS at the UMPHSTGEP (serum malondialdehyde and glutathione concentration measurement). Samples were stored frozen at -70°C prior to processing (last run in November 2020), followed by statistical analysis performed by GraphPad InStat. **Results:** Mean age of the subjects was 70.66 years \pm 5.07 (SD), the study group included 17 male and 26 female patients. Mean HDL-cholesterol was 46.73mg/dl \pm 13.14 (SD), higher values being measured in case of female patients, as expected. Average serum reduced glutathione (GSH) was 2.41mg/ml \pm 0.84 (SD), no correlation could be found between this parameter and malondialdehyde level or any other biochemical parameter measured. Statistically significant difference could be observed between serum GSH levels of male and female subjects ($p < 0.05$), male subjects having higher values. **Conclusions:** Malondialdehyde level (marker of lipid peroxidation) is not closely related to serum glutathione concentration in the studied subjects, probably due to the complexity of the body's prooxidant-antioxidant system. Besides antiatherogenic HDL-cholesterol, GSH can be considered a protective agent against cardiovascular complications, based on the involvement of oxidative mechanisms in this pathology. Our results showed that this factor might be more evident in male subjects. **Acknowledgement:** Financial support was provided by SC Cattus SRL, by a private grant of the UMPHSTGEP, contract nr. 3963/03.06.2020.

Keywords: hypertension, cardiovascular complications, oxidative stress, glutathione, malondialdehyde

CARDIOVASCULAR SURGERY

ACUTE AORTIC DISSECTION- THE MANAGEMENT OF A COMPLEX CASE

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Background: The purpose of the paper is to highlight the importance of the invasive treatment of a pathology with a very wide spectrum of complications, aortic dissection **Material and methods:** We present a case of a 19 years old patient, victim of a traffic accident, transferred to the Cardiovascular and Transplant Emergency Institute of Târgu Mureş. The imaging examination detects 28/65 mm pseudoaneurysm in the descending thoracic aorta with the compression of the true lumen up to 5 mm under the emergence of the left subclavian artery towards thoracoabdominal aorta clinically shown through flaccid paraparesis, multiple right renal infarctions in relation to renal hypoperfusion with diuresis maintained without altering the laboratory samples. During hospitalisation the patient develops abdominal pain and absence of the bilateral femoral pulse, subsequently anuria, malperfusion syndrome with acute reaction of the liver enzymes and renal samples. After Angio-CT reexamination a dissection is shown in the descending aorta, as well as medullary infarction confirmed by the Magnetic Resonance Angiography. The emergency endoprosthesis of the thoracic descending aorta is decided, with Medtronic Valiant Thoracic 26x22x150 mm stent graft, with landing zone above the left subclavian artery. Good final angiographic result, no leak, femoral pulse bilaterally present. **Results:** After the procedure, the patient needs renal replacement therapy through hemofiltration which allows resuming the diuresis with favourable development towards the normalization of the kidney values, as well as inserting a medullary catheter in order to monitor the pressure and the drainage of cerebrospinal fluid, essential management of the medullary infarction the more so as the endoprosthesis of the descending aorta can aggravate the medullary infarction. **Conclusions:** The case presented offers a treatment perspective for the acute descending aortic dissection with posttraumatic etiology, an important aspect in the management of the acute aortic dissection, a pathology with a major impact on the hope and quality of life.

Keywords: acute aortic dissection, endovascular treatment, paraparesis

COMPLEX SURGICAL MANAGEMENT OF A GUCH PACIENT – CASE REPORT

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Background: The prevalence of congenital cardiac malformations in the grown-up population is not known, the large variety of congenital heart disease (CHD) and related specific problems on one hand and the strict space limit of practice guidelines on the other hand presents a challenging task for modern medicine in CHD investigations. **Material and methods:** A 35-year-old male patient presents with constrictive precordial pain and dyspnea at medium-low exertion with progressive worsening with onset 10 months ago. Known with high blood pressure with values between 140-180 / 90-110 mmHg without family and personal history presents in our service for specialized investigations. Echocardiography revealed aortic bicuspid valve with severe stenosis, moderate tricuspid insufficiency and ventricular defect with significantly right-left shunt. Thoracic AngioCT exploration detects aortic coarctation with the aortic lumen up to 12 mm, extended over a segment of about 13 mm. Permeable ascending aorta has a normal caliber of approximately 26 mm and "kinking" at the level of the aortic cross after the emergence of the left carotid artery. It is considered opportune to perform the specific hybrid surgical treatment. First therapeutic moment is the aortic valve replacement and correction for ventricular septal defect with favorable postoperative evolution. After approximately 3 months from the surgery the endovascular treatment of coarctation is practiced with favorable postprocedural evolution without antihypertensive medication needed. **Results:** One month after hybrid procedure the patient is completely recovered, without cardiovascular symptomatology. Laboratory and clinical investigations are in normal relationship with effective control of blood pressure values without antihypertensive treatment. **Conclusions:** Before the cardiac surgery for congenital cardiac malformations, less than one fifth of

children born with such lesions reached adulthood and when pharmacological treatment is outdated, cardiovascular surgery becomes the only solution for a normal life of these patients.

Keywords: GUCH, hybrid cardiovascular treatment, cardiovascular surgery, ventricular septal defect, coarctation

DENTAL MEDICINE

A WAY TO EVALUATE THE "TIME FACTOR" CRITERIUM OF FUNCTIONAL OCCLUSION

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Background: The evaluation of what Korber defined as a "time factor" of functional occlusion is possible today with great accuracy through computerized occlusal analysis systems. In addition to the simultaneity of the occlusal contacts in centric occlusion, determining the centre of force, occlusion time, and disclusion time are some of the parameters used in the occlusal analysis by the TScan system. Our short communication has the intention to highlight the validity of the occlusion time as one of the factors that define the functional occlusion. **Material and methods:** We analyzed 33 occlusal recordings made through the TScan system in patients selected from the registrations of our cases, with signs and symptoms of craniomandibular dysfunction (n = 11), patients with dysfunction associated with moderate or severe depressive disorders (n = 11) and subjects considered with functional occlusion and without any dysfunctional signs or symptoms (n=11). We used the so-called occlusion time (usually less than 0.3 seconds) determined by the TScan occlusal system software. For statistical analysis, we selected the One-Way Analysis of Variance (ANOVA) statistical test to assess the differences in occlusion time (OT) values between the three groups of subjects. **Results:** The results revealed in the group of craniomandibular disorder subjects a mean OT of 0,96 seconds and for the second group with associated depressive state of 0,81 seconds. Both values exceed the one considered normal. The OT mean duration in the group of normal occlusion was of 0.47 seconds (slightly higher than average). The Two-Way ANOVA test shows a statistically significant difference between the three value groups regarding the OT duration (p= 0.04154). **Conclusions:** The findings suggest the validity of OT as an objective parameter to assess the normal occlusions, as well as the dysfunctional ones.

Keywords: functional occlusion, occlusion time, T-Scan analysis

INFERIOR ALVEOLAR NERVE PASSING THROUGH THE MESIAL ROOT OF AN IMPACTED LOWER THIRD MOLAR – CASE REPORT

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Background: Inferior alveolar nerve (IAN) injury is probably the most important accident during removal of lower third molars, due to consecutive deficiency in sensory function and quality of life. The risk of injury during surgery is higher if a close relationship can be seen between the roots and the mandibular canal. The mandibular canal passes between the roots of the mandibular third molars in 0.5% (according to a study conducted by Liqun Gu et al. in 2017), but in extreme cases it can actually pierce the roots of an impacted third molar, in which rare anatomical condition the risk of injury of the nerve - during surgery - is the highest. **Material and methods:** In this paper we present the case of a 48-year-old male patient who referred to our clinic for an impacted lower third molar, with extended coronal decay, consecutive gangrene of the pulp and acute infection of the pericoronal tissues. As the surgical removal of the tooth had absolute indication (as etiological treatment after the management of the acute phase), a CBCT scan was used to determine the relationship between the roots and the mandibular canal. **Results:** The CBCT scan showed that the mandibular canal was passing in a groove on the lingual aspect of the distal root of the wisdom tooth, and - more important - the hard tissues of the mesial root surrounded entirely the above mentioned canal. With attentive planning and careful surgical technique we have managed to remove the tooth without severing the mandibular neuro-vascular bundle. **Conclusions:** In some rare cases the inferior alveolar nerve can pass through the roots of a mandibular third molar. If surgical removal of this tooth cannot be avoided, 3D radiological assessment, attentive planning and careful surgical technique must be considered to prevent inferior alveolar nerve injury.

Keywords: Rare anatomical condition, Inferior alveolar nerve, Nerve injury, Lower third molar, CBCT

FIELDS OF APPLICATION OF CBCT IN DENTO-ALVEOLAR AND ORO-MAXILLO-FACIAL SURGERY

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Background: CBCT represents a precise, relatively cheap, more and more accessible - for both patients and practitioners - imagistic method of assessment of bony structures of the jaws. It provides reliable 3D images with practical utility in many fields of dentistry and maxillofacial surgery. Another important advantage is the low radiation dose compared with other types of CT scans. **Material and methods:** For this paper we have selected several CBCT scans of patients who have referred to our clinic, to exemplify the most important fields of application of this paraclinic assessment. **Results:** CBCT images were helpful to specify the correct diagnosis, to establish a proper treatment plan and to avoid some possible intraoperative accidents or complications. **Conclusions:** CBCT can be reliably applied in different fields of dento-alveolar and oro-maxillo-facial surgery, being indispensable in many clinical situations.

Keywords: CBCT, Dento-alveolar surgery, Oro-maxillo-facial surgery, Fields of application

INDICATIONS AND LIMITS ON TEETH EXTRACTION IN PEDIATRIC DENTAL PRACTICE

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Background: The treatment of dental-maxillary anomalies is a complex one, which addresses both etiopathogenic factors and clinical morphological and functional disorders. The therapeutic decision on the management of space on the arch is difficult and dental extraction has multiple advantages, but also contra-indications/adverse effects. The authors aim to present some of the adverse effects of dental extraction, with a focus on the importance of assessing total space and analyzing facial growth. **Material and methods:** The study is longitudinal, retrospective, carried out on 135 children, aged 9-18, who presented themselves in the Orthodontics Department Clinic of the Faculty of Dentistry, UMFST Tg. Mures in 2016-2019. Patients have been divided into three study groups by age: 43 patients between 9-11 years old, 45 patients between 11-15 years old and 47 patients between 15-18 years old, assessing the types of orthodontic appliances used and the impact of dental extraction on the evolution of orthodontic therapy. **Results:** A small percentage of patients 17% followed non-extractions treatment, especially in the 9-11 aged group, where orthodontic therapy also matted on the growth cluster and facial pattern completely contraindicated dental extraction. A relatively high percentage of 53% patients, with heavy crowding, followed fixed orthodontic treatment with dental extraction, and 20% of patients started non-extractions, expansion/distalization therapy, but completed orthodontic treatment with dental extraction. There are also 10% of patients who showed themselves at orthodontists with dental extraction, especially of the permanent first molar, (age group 15-18 years) which led to a longer treatment time. **Conclusions:** In the orthodontic treatment , the decision to extract a permanent tooth is rather difficult, being conditioned by many factors, and the advantages of obtaining space on the arch must also be analyzed from the perspective of biological damage.

Keywords: orthodontic, treatment, extraction, growth, damage

THE VICIOUS CIRCLE IN THE MANAGEMENT OF DENTAL AESTHETIC DYSMORPHOPHOBIA

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Background: Introduction: Dental aesthetic dysmorphophobia exists as the patient's exaggerated concern for a minor or non-existent dental defect. The unsightly appearance becomes obsessive for the patient, requesting treatment for an "illusory" problem

being in contrast with the dentist's considerations. The patient's perception of self-image can constitute a reason for requesting a dental treatment which may not be necessary. At the same time, these patients can develop demanding behavior towards dentists who fight these aggressive whitening techniques, always looking for other opinions. **Objectives:** The main purpose is to demonstrate the difference between the patient's and the dentist's perceptions, regarding the aesthetics of the tooth, referring to its color and shape. **Material and methods:** Six "extreme makeover" dental cases have been evaluated from the aesthetics and chromatics point of view. Patients who requested unjustified tooth whitening or unusual prosthetic treatments with changes in dental morphology were included in this analysis. The evaluation was performed using questionnaires and photographs in addition to photographic simulations. **Results:** It has been emphasized that the request to undergo a whitening procedure to over-bleached teeth can have harmful consequences. Acceptance of some unusual aesthetic demands, such as atypical shape of the teeth, does not pose a risk to the patient's health but may contradict the aesthetic principles or standards. A potential conflict between the patient's desire and the dentist who does not want to assume responsibility for an unethical procedure should be avoided. **Conclusions:** It is extremely challenging to change the self-image perception when the patient aims that "the reality exists not just as it is but just like every individual perceives it!". Dental practitioners must try to positively influence the therapeutic compliance guidance of pro-health behaviors. When facing the problem of an unhealthy request, a multidisciplinary approach (dentist, psychiatrist and psychologist) would be beneficial for these patients.

Keywords: Dental aesthetics, self-perception, whitening, phobia, multidisciplinary approach

FACULTY OF DENTISTRY: UPGRADE THE PRACTICAL SKILLS OF FIRST YEAR STUDENTS IN ONLINE DENTAL EDUCATION

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Background: Implementing an interactive online teaching "model", theoretically and practically, for first year Dentistry students, by restructuring the educational system and demonstrating its efficiency in preparing and building the Dental student's skills.

Material and methods: A new teaching method has been put together for the first year **George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureş Faculty of Dental Medicine** students, in order for them to develop their knowledge and practical abilities. The tooth models were crafted in soap, using a method adapted to online lessons. The steps, as well as the results throughout the online workshops were evaluated, these constituting the key-points in the evaluation of the students. Each student was able to communicate with the teacher, make adjustments and improvements, all of them being executed online. The final model was photographed from several angles, each of them being assessed by the teacher. The innovative factor was using soap as well as the students' feedback and recommendations given in order to improve the online workshops.

Results: Each student showcased their work through an assignment consisting of 5 pictures of tooth carved in soap. The assignment included also student commentaries, difficulties, evaluation of their own models, personal impressions and even suggestions of improving the quality of the work-practice. **Conclusions:** Carving teeth in soap can substitute gypsum tooth carving, with a relatively easier learning process. Students felt like doing something practical, producing a finished project. Professional performance and practical abilities have improved drastically. Practical skills were combined with the theoretical framework, resulting in a constructive collaboration between teacher and student. The tasks were interactive and the students performances improved, even though the difficulty level was higher, with more tooth morphological details to obtain.

Keywords: practical abilities, online, education

UPPER LIP NECROSIS AFTER INCORRECT DENTAL IRRIGATION WITH CITRIC ACID 40%- A CASE PRESENTATION

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Background: Endodontic treatment is necessary for the preservation and restoration of necrotic teeth. During mechanical root

canal preparation, a considerable amount of debris and smear layer is produced and in order to obtain clean surfaces and also to eliminate bacteria, different irrigation solutions are used. The most preferred substances are sodium hypochlorite, Ethylenediaminetetraacetic acid (EDTA), citric acid, in different concentrations. Citric acid is a chelating agent with satisfactory chemical stability which can be used to condition dental surfaces but also for root canal irrigation because of its capacity to eliminate the inorganic component of the smear layer and its antimicrobial properties. **Material and methods:** We present the case of a 42-year-old woman who was diagnosed with necrosis of teeth 1.1 and 1.2. During the mechanic endodontic treatment of tooth 1.1, the practitioner created a false cervical pathway, and without noticing, continued with root canal irrigation using citric acid 40% concentration. Shortly after the procedure, the patient experienced sharp local pain and swelling of the upper lip and was prescribed antibiotics and anti-inflammatories. After 2 days with no improvement, she was admitted to the Oral and Maxilo-Facial Clinic, in Targu Mures. The evaluation reveals a large necrotized area which involves the keratinized gingiva, the vestibule, the lip mucosa, and underlying submucous and muscular tissue along with loss of lip sensibility. Surgical debridement was performed under general Anesthesia following daily antiseptic wound dressing. **Results:** Local evolution after surgical debridement is favorable with secondary wound healing and no functional impairment, but because of the great loss of soft tissue, plastic intervention may be needed to obtain optimal aesthetic results. **Conclusions:** Even though citric acid can be applied on root surfaces, prolonged contact with soft tissues leads to permanent damage. Endodontic treatment is a complex maneuver and requires advanced experience.

Keywords: endodontic treatment, tooth necrosis, irrigation, citric acid, soft tissues

CEPHALOMETRIC EVALUATION OF INCISORS POSITION IN DIFFERENT SKELETAL MALOCCLUSIONS

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Background: The most important clinical use of the evaluation of cephalometric landmarks, planes, and angles is in recognizing the anatomic basis for a malocclusion. The aim of our study was to determine the influence of the growth direction of the mandible (N-S/Gn) on the position of the incisors. **Material and methods:** 119 lateral radiographic cephalometric analysis has been performed using pretreatment records of patients from a private office. After filtering outliers using the GraphPad Outlier Calculator, data of 116 patients (77 women and 39 men) were statistically analyzed using the GraphPad InStat program for Pearson correlation. The relevant, processed data of our study were the angle determining the growth direction of the mandible (NS/Gn), the position of the upper incisor to the maxilla (+1/NL), the position of the lower incisor to the mandible (-1/ML), the interincisal angle (+1/-1), the position of the upper incisor relative to the apical basis of the maxilla (+1i/NA) and the position of the lower incisor relative to the apical basis of the mandible (-1i/NB). **Results:** After the angular distribution of the ANB, the highest statistical significance was observed in skeletal class III cases comparing with skeletal class I cases regarding the position of lower incisors (R=-0.7187). In the same group, a slight negative correlation was also observed between NS/Gn and -1i/NB (R=-0.3965). Comparison of skeletal class I and class II cases also showed a slight correlation between NS/Gn and -1i / NB, but in these cases, the correlations were positive (R = +0.245, R = + 0.2764). **Conclusions:** The growth direction of the mandible influences the position of the lower incisors in each of the skeletal class III cases. High statistical significance was found between the NS/Gn is and angles which describe the quantity of lower incisor retrusion.

Keywords: Orthodontics, cephalometry, skeletal malocclusion

CRANIAL BASE FEATURES IN DIFFERENT TYPES OF ANTEROPOSTERIOR AND VERTICAL SKELETAL MALOCCLUSIONS

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Background: Besides the evaluation of growth pattern, cephalometric radiographs can be used to evaluate dentofacial proportions and to evaluate the skeletal basis for a malocclusion. Our study aimed to evaluate the interactions between cranial base morphology and anteroposterior and vertical jaw relationships. **Material and methods:** Digital cephalometric analysis (AudaxCeph

software) was performed on 113 pre-treatment orthodontic records (mean age 14.08 ± 3.17). The inclination of the cranial base (SN/Ba), the position of the mandible and maxilla to the cranial base (SNA, SNB), maxilla (SN/NL) and mandible (ML/NL) rotation and mandibular growth direction (NS/Gn) was evaluated. Statistical analysis was performed using Graphpad InStat (Prism) software, Pearson correlation test was applied. **Results:** A statistically moderated positive correlation was found between the inclination of the cranial base and the rotation of the palatal plane ($R=0.5039$). A significant slight negative correlation was found between SN/Ba angle and the rotation of both jaws (SNA: $R=-0.4248$, $p<0.00001$ and SNB: $R=-0.443$, $p<0.00001$). **Conclusions:** The inclination of the cranial base and the inclination of both jaw planes has a certain influence on the anteroposterior and vertical jaw relationship. Tipped cranial base will slightly influence the position of the maxilla and the growth direction of the mandible as well.

Keywords: cephalometry, cranial base, skeletal malocclusion

ESTHETICS IN FIXED PROSTHODONTICS - PAST AND PRESENT

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Background: The perception of the esthetics dates back to antiquity. While dental treatments were mostly limited to solving functional problems in the past, today, our prosthodontic treatments have to meet higher standards even from the esthetic point of view due to the rapidly evolving technology, the apparition of new materials, and digital techniques. **Material and methods:** An alternative to metal-ceramic restorations nowadays is the use of zirconia ceramics realized by digitized workflows. The adhesive bonding techniques and the different magnification solutions allow the everyday practice of minimally invasive dentistry by restoring esthetics with ceramic veneers. Increasing importance is being attached to enamel's presence on the prepared tooth surfaces, allowing long-term adhesion to our ceramic restorations. **Results:** Digitization of the work processes makes it possible to minimize errors mostly related to the material and the technical workflow. The complex dental simulators offer dental students an excellent opportunity to achieve the clinical and technical steps of dental rehabilitation by developing the different ergonomic work positions and evaluating the obtained results. In this way, they can launch their professional career as an "experienced" beginner. **Conclusions:** However, the tooth preparation, the treatment plan, and the restoration's bonding were and will be the dentist's responsibility. Learning the therapeutic procedures is essential from the beginning of professional formation.

Keywords: esthetics, enamel, ceramics, dental simulator, adhesive bonding

FORENSIC MEDICINE

SURPRISE OF AN AUTOPSY – AN ACCESSORY LIVER LOBE ACCIDENTALLY DISCOVERED

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Background: Accessory liver lobes are a rare condition and in addition to ectopic liver tissue, heterotopias of the liver, focal modular hyperplasia, accessory lobe is part of the positional abnormalities of the liver. The accessory lobe of the liver is a congenital ectopic liver tissue, mostly due to embryonic heteroplasia. In rare cases, such an accessor lobe can be caused by trauma or surgery. Accessory liver lobes can be joined with normal liver tissue, or they can be completely separated, these cases being very rare. Most patients have no symptoms and most cases are unexpectedly discovered during surgery or autopsy. **Material and methods:** The forensic autopsy with theremoval of visceral fragments, for the histopathological examination, of a 53 years old man, deceased 15 days after left parietal craniotomy and evacuation of intraparenchymal hemorrhage following a craniocerebral trauma by falling from another level. **Results:** Following the internal examination of the corpse, at the junction of the V and VI hepatic segments, corresponding to the anterior hepatic line, was found an accessory lobe, well delimited, pyramidal shape, 6x4x4 centimeters, with the same structure and consistency as the rest of the liver tissue, with lobular pattern present on section. **Conclusions:** Although the death of the 53 years old pacient was violent, following a trauma, unrelated to the accessory liver lobe found, it is demonstrated once again that the beauty and importance derives precisely from its rarity. You don't see an accessory liver lobe every day and that's why it is said that what comes out of the routine brings an extra color in life and in forensic autopsy too.

Keywords: autopsy, accessory, liver, lobe

A VERY RARE ACCIDENTAL DISCOVERY AT AUTOPSY - CARDIAC HYDATID CYST

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Background: Echinococcosis (hydatidosis, hydatid disease, cystic echinococcosis) is a chronic parasitic disease whose etiological agent is the larval form of tapeworm Echinococcus granulosus. The disease has a cosmopolitan spread, but is more common in countries where agriculture, especially sheep farming, occupies an important place in the nationa economy, the highest prevalence being recorded in areas with lower standards of hygiene and development. The development of the hydatid cyst in the human body in achieved by ingesting the oncospheres with the formation of the primary hydatidosis, located in various organs. Most embryos are retained by the hepatic capillary network (60-70%), 20-30% are retained by the pulmonary filter, and 10-15% pass into the great circuit, and can be disseminated in muscles, bones, brain, heart etc. **Material and methods:** The forensic autopsy of a 50-year-old man performed at the Institute of Forensic Medicine Tîrgu Mureș, who died of mechanical asphyxia by hanging at home. **Results:** Macroscopic: at the level of the heart, postero-apexian, comprising both ventricles, invading the ventricular cavities, a whitish-yellow cystic pseudotumor formation was highlighted, of firm consistency, with smooth walls, from wich clear liquid was drained at the time of sectioning. Microscopic: cystic formation with the wall consisting of a fibrohyalin connective tissue with calcification areas and reduced predominantly chronic lympho-plasmacytic inflammatory infiltrate, inside the cyst with numerous accellular membrane structures of different sizes, focal with wavy appearance, without visualizing the presence of daughter cells (cardiac hydatid cyst). **Conclusions:** Even if the death of the 50-year-old man was violent, being a mechanical asphyxia by hanging, the extreme rarity of the location of the extrahepatic hydatid cyst, namely at the level of the heart, should not be neglected.

Keywords: cardiac hydatid cyst, autopsy, rarity

INTERDISCIPLINARITY IN ESTABLISHING THE CAUSE OF DEATH IN RARE DISEASES - CHRONIC MYELOPROLIFERATIVE DISEASE ASSOCIATED WITH BUDD-CHIARI SYNDROME

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Background: Budd-Chiari syndrome or veno-occlusive liver disease is the occlusion of the hepatic veins caused by the blockage of larger or smaller veins with secondary hepatic congestion as blood enters the liver and can no longer exit. It occurs mainly in people with thrombotic diathesis, including myeloproliferative disorders, coagulation disorders in pregnancy, inflammatory diseases or tumors. **Material and methods:** There will be reviews from the national and international literature, as well as the case of a 35-year-old woman, autopsied at the Institute of Forensic Medicine Tîrgu Mureș, known from many years with chronic myeloproliferative disease, who presented at the emergency department with altered general condition, clouded, GCS-8 points, with signs of encephalopathy, ascites, severe thrombocytopenia, thrombosis of suprahepatic veins, inferior vena cava, portal vein and iliac veins. **Results:** Macroscopic: on external examination of the corpse a thrombocytopenic purpura was highlighted; on internal examination, hepatic cirrhosis (with hepatic cytolysis) with ascites fluid in large quantities, without visible thrombosis in the venous or arterial system. Microscopic: at the hepatic liver there are centrolobular veins of increased diameter, with thickened wall, some with intraluminal adherent thrombi, focal obstructive, and others with the lumen completely obstructive by a fibrous tissue; on extensive areas and on multiple examined fragments numerous blood infiltrates are observed, mainly at the level of fibrosis, focal areas with hemosiderin-loaded macrophages (primary Budd-Chiari syndrome). **Conclusions:** An association between myeloproliferative disease and Budd-Chiari syndrome is relatively common, but a fulminant form of this syndrome is quite rare, given the complications that occurred in a relatively short time. It is important the collaboration between the attending physician and the forensic pathologist/pathologist in order to be able to establish exactly the thanatogenerative cause of death, given the young age and the sudden evolution of the rare disease from which the patient suffered.

Keywords: chronic myeloproliferative disease, Budd-Chiari syndrome, fulminant

POSTMORTEM CORELATION BETWEEN INCREASED EPICARDIAL ADIPOSE TISSUE AND SUDDEN CARDIAC DEATH IN ACTIVE POPULATION

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Background: Under normal conditions epicardial adipose tissue (EAT) plays a cardioprotective role, however an excess of EAT has been associated with cardiac arrhythmias. The aim of the study was to investigate the clinical and autopsy pathological features of EAT of persons who died from SCD. **Material and methods:** We studied 10 deaths that were autopsied at IML Tg. Mureș, 5 who died from SCD and 5 with no past medical history who died from polytrauma. On all autopsies we measured the thickness of EAT and of the myocardium, macro/microscopically quantified coronary atherosclerosis and weighted the heart. **Results:** Sudden cardiac death was the first symptom in 4/5 cases from the first group, only 1 had a history of chest distress or dyspnea, 4/5 of the SCD group had no medical history. At autopsy, the heart weight of the SCD cases was moderately increased, 3/5 cases had an increased thickness of EAT and of the myocardium, with higher degrees of coronary atherosclerosis than the cases who died from polytrauma. **Conclusions:** An increased thickness of EAT could signal a high risk factor of SCD. Targeted screening with an assessment of EAT/myocardium thickness alongside coronary atherosclerosis evaluation could lower the incidence of SCD if proper in time measures are taken in active population with no medical history or clinical symptoms.

Keywords: sudden cardiac death, epicardial adipose tissue, autopsy, forensic medicine

MEDICAL FORENSIC AND JUDICIAL INTERPRETATION OF INVESTIGATIONS CONCERNING LIFE ENDANGERMENT

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Background: From a forensic and legal point of view, life endangerment represents a much debated issue. In order to meet the criminal investigation department criteria, forensic pathologists are required to make assessments on the severity of traumatic injuries, and an accurately evaluation of traumatic injuries as well as their consequences. **Material and methods:** The injuries that jeopardize a victim's life are represented by those injuries that lack qualified medical intervention provided in a timely manner, certainly leading to the victim's death. We must keep in mind the state of immediate or belated imminent danger and that the injury, in its natural evolution, must cause the patient's death, his life depending on qualified medical intervention. By extrapolation, the juridical correspondent is represented by art.194: personal injury, the new Penal Code. **Results:** The authors review and comment on the main particular aspects of life-threatening injuries, based on topography and anatomical plans with forensic approach. **Conclusions:** The authors review and comment on the main particular aspects of life-threatening injuries and considering the forensic interpretation (self-defense injuries, sidearms, firearms, traffic accidents, falling fatalities, etc.) they provide arguments for the classification from a forensic point of view in relation to life endangerment criterion.

Keywords: life endangerment, traumatic injuries, forensic pathologist

HEMATOLOGY

PROGNOSTIC AND SURVIVAL ANALYSIS IN PATIENTS WITH MANTLE-CELL LYMPHOMA (MCL)- A SINGLE-INSTITUTION STUDY

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Background: Mantle cell lymphomas(MCL) represent a subgroup of non-Hodgkin`s lymphomas (NHL), with high heterogeneity, unpredictable, mostly aggressive evolution, and poorer prognostic. Objectives: To study prognostic stratification (according to classical prognostic indices) and overall survival(OS) in an MCL group of patients, in relationship with "real life", usually used parameters. **Material and methods:** Study type: qualitative, retrospective, cohort-type, inclusion period-122 months (January 2010-February 2020), observation period-125 months. Patients included: 20 MCL cases (17 males, median age 70,5 years), predominant histological subtypes: classical(45%) and leukemic(40%). For prognostic stratification, we used Mantle-Cell Lymphoma International Prognostic Index (MIPI) and Charlson Comorbidities Index (CCI). For overall survival (OS) evaluation, the Kaplan-Meyer method (with inter-curves comparison according to MIPI classes, ICC, clinical and routine laboratory parameters). **Results:** MIPI s score median value was 7,1, 85% of cases in the high-risk category. When calculating CCI, 55% of patients have>7points (higher risk). MIPI and CCI revealed visible OS differences but with p far from 0,05. We also noted ECOG status, splenomegaly, B symptoms, leukemic blood picture having close to statistically significant OS differences. An unexpected prognostic relevance appeared, with statistical significance, for neoplastic anemia. **Conclusions:** The prognostic/predictive potential of classical MIPI is not questionable. But in "real life" , some other routine clinical or laboratory parameters may reveal an additional prognostic significance, especially for small group studies. The possible prognostic or predictive potential of neoplastic anemia needs to be evaluated in more extensive, randomized multi-institutional studies.

Keywords: Mantle-Cell Lymphoma, prognostic, overall survival

HYGIENE

THE FEASIBILITY OF IMPLEMENTING THE BRIEF ADVICE TO STOP SMOKING IN COMMUNITY PHARMACIES IN MURES COUNTY, ROMANIA

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Background: Providing the brief advice to stop smoking (BASS) can significantly increase motivation to quit, long-term smoking cessation rates, and has a substantial impact on public health. The study aimed to evaluate knowledge, attitudes, and willingness of community pharmacists in Mures County, Romania, to provide BASS to customers. **Material and methods:** The observational, cross-sectional study included a representative sample of urban community pharmacy staff members working in Mures County, Romania. Data were collected using an online questionnaire. Descriptive statistics were calculated. **Results:** Generally, more than 90% of the respondents acknowledged that smoking is addictive, represents a health hazard, and increases the risk of lung and laryngeal cancer, chronic obstructive pulmonary disease, heart attack, and stroke. Up to 70% of the respondents recognized the most common scientifically proven quit medications such as nicotine replacement therapy, bupropion, and varenicline. The majority of the pharmacists agreed that they should regularly ask the customers about their smoking status and encourage smokers to quit, and they should receive continual education regarding quit services, medication, and techniques. BASS was credited with very high efficacy by 17.1%, high efficacy by 26.8%, and moderate efficacy by 46.3% of the respondents. The most common perceived barriers to providing BASS in community pharmacies were lack of interest from costumers (78.0%), lack of time (73.2%), and lack of educational materials (39.0%). About 70% of the pharmacists received no formal training regarding quit services but more than 75% of them would be interested or very interested to earn such a qualification. About 65% of the respondents estimate that they would be able to dedicate 10-15 minutes of their working time to provide BASS to interested customers. **Conclusions:** Overall, the study suggested that a program aiming to provide BASS in Mures County urban community pharmacies may be feasible and useful.

Keywords: brief advice to stop smoking, community pharmacy, smoking prevention

THE IMPORTANCE OF MONITORING SULFITES IN FOOD

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Background: Sulfites are used in the food industry for its preservative and antioxidant properties. They release sulfur dioxide, the active component involved in preserving food and medicine. Sulfites can be involved in inducing allergic reactions such as asthma, rhinitis, urticaria or even anaphylactic shock. **Material and methods:** Within the national synthesis of food additives monitoring, coordinated by CRSP Tg.Mures, in the period 2017-2019 was determined the sulfite content (E220-228) of various food products, harvested from producers in the country. The analyzes were performed by the method validated according to SR EN 1988: 2-2003 - Part 2 - Enzymatic method.50 samples of beer were analyzed in 2017, 84 samples of beer in 2018, 29 samples of wine in 2018, 33 samples of dehydrated fruits and 29 samples of dehydrated vegetables in 2019. **Results:** In 2017 there were no exceedances of the amount of sulfites in the analyzed beer samples, in the following year 5 beer samples 2 wine samples showed exceedances of the sulfite quantity, and in 2019 all the analyzed samples were compliant from the point of view of sulfite content. **Conclusions:** The widest possible introduction in official control of monitoring the amount of additives used in food is an important aspect in protecting the population against the effects due to inadequate consumption of food additives, removing or limiting risk factors for public health.

Keywords: food additives, sulfite, public health

INTERNAL MEDICINE

PREDICTIVE FACTORS AND DIFFERENT EVOLUTIONS IN HEMATOLOGICAL PATIENTS WITH COVID-19

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Background: The SARS-COV-2 virus outbreak shook the world, and challenged the medical field professionals from all perspectives, in order to develop effective tools for diagnose, treatment, and prevention. It is known that some biomarkers are used to predict the mortality and prognostic of infected patients. As the literature says, there are some proinflammatory and procoagulant factors known, that interfere with the disease prognostic and severity such as: ferritin, IL-6, D-dimers, LDH, fibrinogen, CRP. **Material and methods:** We present a series of two cases of hematological patients with SARS- COV-2 disease, highlighting the relation between the virus-infection and some biomarkers of prognosis. The first case-A is about an 80-years-old woman known with multiple myeloma who was tested positive after admission to the Hematology department. She was tested positive and had minimal pleural effusion accompanied by overlying pulmonary condensation. The second case-B is about a 61-years-old male known with acute myeloblastic leukemia, also tested positive, with poor radiologic modification. In this study, we correlated the clinical status of the patient, the prognosis, and the laboratory findings. **Results:** Both of the patients had increased levels of ferritin, but the interesting fact is that in case-A, the levels went from approximately 10 to 25x normal in one week. Also, D-dimers were higher and predicted a worse outcome. Elevated IL-6 was correlated with a severe form of the disease, and despite the treatment with Tocilizumab, has shown life-threatening complications, such as pneumomediastinum. **Conclusions:** Increased levels of those biomarkers were correlated with higher mortality, besides the clinical hematological background. Furthermore, minor-moderately elevated biomarkers were correlated with a much better outcome and less severe complications in patient with acute myeloid leukemia. All in all, ferritin, IL-6, and D-dimers modification patterns through the disease, should certainly be used in the clinical management of SARS-COV-2 infection, even in patients with hematological diseases.

Keywords: proinflammatory factors, haematological, severe COVID-19 pneumonia, pneumomediastinum

NEUROLOGY

BENIGN MULTIPLE SCLEROSIS – A THEORETICAL CONCEPT OR REALITY?

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Background: The diagnosis of benign multiple sclerosis (B-MS) is shadowed by numerous controversies and lack of consortium, many considering it temporary or improbable. **Material and methods:** We performed an observational, both retrospective and prospective study which included 34 MS patients with a disability score ≤ 2.0 that have been continuously treated with Interferon beta 1b (IFN beta 1b) for at least a decade. The patients were assessed based on their demographical and clinical data, including ambulatory and psycho-cognitive parameters, such as Hamilton's depression inventory (HAM-D) and Symbol Digit Modalities Test. Serum values of various pro and anti-inflammatory interleukins (IL) were determined in 26 patients, using a pre-mixed Th17 panel. **Results:** Most of the patients started treatment in the first three years following diagnosis (67.64%). In 30% of the cases, the onset presented with brainstem symptoms. 91% of the patients presented no relapses in the first year of treatment but up to 47% of the patients presented with 2 or more relapses throughout the treatment. A negative significant correlation was observed between the HAM-D and SDMT. Significant positive correlations were noticed between IL-10 and the duration of the disease and between IL-6 and the rate of relapses on the treatment. **Conclusions:** Although the persistence of relapses doesn't seem to impact disability accumulation, they are dependent on the pro-inflammatory activity of IL-6. The positive association between IL-10 and duration of the disease suggests that, perhaps, high baseline IL-10 influenced the evolution of the disease towards a mild one. Future studies on this population are necessary in order to determine whether the patients are the perfect responders to IFN beta 1b treatment, or the particularities of their immune system ensured a mild evolution and stability of the disease.

Keywords: Benign Multiple Sclerosis, Interleukins, Interferon beta1b, Evolution, Immune response

ASSESSING THE DETERMINANT FACTORS FOR FATIGUE IN MULTIPLE SCLEROSIS PATIENTS

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Background: Fatigue is one of the most frequent complains of multiple sclerosis (MS) patients throughout the evolution of the disease, carrying a high impact upon the quality of life and significant socioeconomic consequences, including unemployment. The purpose of this study is to assess the determinant factors for fatigue in MS patients. **Material and methods:** We performed a prospective study which included 150 MS patients and 100 healthy controls (HC). Demographical data, marital and occupational status, income and education level were assessed in all the participants. MS patients were also assessed from a clinical standpoint. All the participants completed Beck Depression Inventory-II (BDI-II) and Modified Fatigue Impact Scale (MFIS). **Results:** MS patients had significantly higher results in MFIS test compared to HC. We obtained positive statistical correlations between MFIS and age, total number of relapses, duration of the disease, disability and BDI-II (Spearman's correlation). Male patients had significantly lower fatigue scores compared to female patients. The fatigue level was significantly lower in fully-employed patients compared to the other categories. Relapsing-remitting MS patients had significantly lower fatigue levels compared to secondary-progressive MS patients. The patients with no impact on BDI-II scores had significantly lower fatigue levels compared to the ones that presented with depressive symptoms. Using linear multivariate regression, we demonstrated that MFIS is influenced by gender, occupational status and BDI-II score. **Conclusions:** The causes for fatigue in MS patients are multifactorial. Fatigue is more common in MS patients compared to HC and the determinant factors are the following: presence of depression, female gender, clinical activity of the disease, marital and occupational status.

Keywords: fatigue, multiple sclerosis, determinant factors

PATHOLOGY

ASSOCIATION OF ARTERIAL CALCIFICATION WITH ANATOMICAL LOCATION OF STENOSIS IN PATIENTS WITH PERIPHERAL ARTERY DISEASE

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Background: We provide a comparative study with a focus on the mineral patterns in site-specific atherosclerotic plaques.

Material and methods: 82 atherosclerotic plaques were harvested by conventional transluminal angioplasty from the different segments of femoro-popliteal axis (FPA). The specimens were processed using the standard histological method. Histological grade of the atherosclerotic plaque was established according to the AHA classification criteria. The calcification patterns were evaluated based on quantitative measurements of mineral deposits by morphometry. A comparative analysis of mineral deposits in different arterial segments was performed. **Results:** Regarding the localization, the advanced plaques (VII and VIII types) develop predominantly at the level the superficial femoral artery (SFA). In the FPA plaques the mineralised surface increases in parallel with the narrowing of the vascular lumen diameter. The morphometric study of the total pathological calcification score (pCS) showed significant difference between the proximal (p) and distal (d) segment of SFA plaques ($p=0.013$). Regarding sheetlike plaque calcification pattern in paired comparison of the FPA segments (pSFA vs. dSFA, pSFA vs. PA), we found no significant difference ($p=0.134$ and $p=0.49$). In case of the simple nodular pattern, calcification was significantly larger in the plaques of the distal sFA and popliteal artery (PA), in comparison with plaques of proximal sFA ($p = 0.004$). pCSs calculated in plaques with extensive calcification pattern showed significant difference was observed between pSFA and dSFA plaques ($p=0.017$). **Conclusions:** In our study, we demonstrated that a population with similar demographic and biological data develops at the level of smaller caliber arteries (dSFA/PA) larger areas of calcification than at the level of larger caliber artery (pSFA). These results suggest that the mechanism is site-specific, and wall structure dependent.

Keywords: Peripheral artery disease, Arterial calcification, Morphometry

PEDIATRICS

HYPOGLYCEMIA IN CHILDREN

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Background: Hypoglycemia is a syndrome characterized by polymorphic clinical manifestations, predominantly neuro-psychic (drowsiness, seizures, myoclonus) induced by a decrease in blood glucose concentration below the physiological limit. The etiologic diagnosis of the infant's and children's severe hypoglycemia and the management are difficult and required a complex approach. **Material and methods:** We presented clinical cases, respectively patients hospitalized in the Pediatric Clinic 1 Targu-Mures in which hypoglycemia is clinically similar, but with different glucose values and different causes. To determine the etiology multiple laboratory investigations are sometimes required. **Results:** The blood source (arterial, venous, capillary), the time of determination (pre or postprandial) and the nature of the biological sample (plasma, serum or whole blood) must be considered to evaluate the results of blood glucose. Intranasal glucagon is a new treatment, easy to use, accessible in our country. **Conclusions:** Hypoglycemia is a major emergency both by immediate effects (seizures, coma, death) and by late complications on neurological development. The main steps in the management of hypoglycemia are the elucidation of the etiology and the identification of the type of hypoglycemia: severe, persistent or recurrent.

Keywords: hypoglycemia, infant, children

PHYSICIAN'S AWARENESS ABOUT VACCINATIONS IN CHILDREN WITH MALIGNANCIES AND A BUNCH OF RECOMMENDATIONS IN THIS FIELD

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Background: Children with malignancies have an impaired immune system due to their illness, chemotherapy, irradiation, surgery and biological therapies. They are prone to develop infections, otherwise preventable with vaccinations. Impaired function of the B lymphocytes induces lower serum levels of immunoglobulins in these patients, while the lower number of the T lymphocytes weakens the cellular immunity. The aim of the study is to assess the knowledge of physicians regarding the vaccinations in children with malignancies and to highlight some international guidelines in this field. **Material and methods:** Twentyfive doctors (13 pediatric hematologists and 12 family doctors) were interviewed by a written questionnaire about some practical issues regarding vaccinations in children with malignancies. International guidelines in this respect were studied. **Results:** In both groups the main attitude of doctors about the vaccination of these special patients was one of avoidance, neither of them felt this task to belong to them. Based on international guidelines, some features can be outlined in this topic: a). vaccinations are contraindicated during and up to 6 months after the completion of cancer therapy; b). inactivated vaccines can be safely administered after this time; c). live attenuated vaccines are very dangerous in this population as these can generate potentially fatal, severe systemic infections. Such live vaccines (rubeola-mumps-measles, rotavirus, varicella, live influenza vaccine, per oral polio vaccine) can be administered much later, at least after 12-24 months from the completion of cancer therapy; d). the timing of vaccinations depends on other features also, such as the last date of infusion of human immunoglobulins and other blood products. **Conclusions:** Vaccination of children with malignant diseases is a highly responsible task, which can be achieved with a good cooperation between the pediatric hemato-oncologist and family doctor, in the best interest of the patient, using the international guidelines.

Keywords: child, vaccine, malignancy

ASSOCIATION BETWEEN SMALL FOR GESTATIONAL AGE AND CONGENITAL HEART DISEASE

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Background: Small for gestational ages (SGA) refers to a newborn who does not reach its expected biological potential in utero. Fetal growth restriction (FGR) is a pathological condition caused by placental insufficiency (PI). 25% of pregnancies in low-middle income countries are affected by PI. The distinction between SGA and FGR is extremely relevant, and Doppler measurements is critical to achieve this goal. The aim was to investigate the effect of small for gestational age and acidemia at birth impact on cardiovascular performance. **Material and methods:** To study aimed to investigate the cardiac functional adaptation during immediate postnatal period in a SGA group and compare it with a appropriate for gestational age (AGA) group. One ultrasonographer performed all scans. Demographics, obstetrical and neonatal characteristics along with ecocardiographic indices were recorded and analysed. **Results:** The two groups were homogenous for demographics, and maternal obstetrical characteristics. Biochemical markers of myocardial cell injury were not significantly different between groups. Left ventricular ejection fraction (EF) and tricuspid annular systolic excursion (TAPSE) were lower in cases compare to control. Mitral and tricuspid E and A waves peak velocities were lower in cases compared to controls ($p=0.02$) and high pulmonary artery systolic pressure (PASP) was detected more frequent among cases (19% vs 13%) but the difference did not reach the statistical level of significance. **Conclusions:** When we compared our results with published normative data for LV and RV our measurements were 25-30% lower for SGA cases. Overall the rate of trans- atrial and trans-ductal shunting was also higher compare to healthy term neonates. Cardiac disfunction is a common feature of RFG but not for SGA newborns. Further reasearch is needed to evaluate the potential long term consequences on their cardiovascular system.

Keywords: blood biomarkers, cardiac dysfunction, small for gestational ages, fetal growth restriction, cardiovascular performance

VOLUMINOUS ABDOMINAL CYST IN A 15-YEAR OLD TEENAGE GIRL – CASE PRESENTATION

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Background: Ultrasonography plays a particularly important part in the etiological diagnosis of abdominal pain. Although tumors are a rare cause of pediatric abdominal pain, ultrasonography is the first intention method for diagnosing tumoral growths. In teenage girls, pelvic cystic formations of large dimensions can cause abdominal pain by compressing against neighboring organs and can also cause future complications. As far as treatment and prognosis are concerned, the differential diagnosis of abdominal tumors is particularly important. **Material and methods:** The authors would like to present the case of a 15-year-old girl with strong abdominal pain and fainting spells. The abdominal pains started 6 months prior to our medical examination, slowly progressing in strength, subsequently followed by constipation, voiding difficulties and fainting spells. The abdominal ultrasound showed a voluminous cystic mass, near the urinary bladder. **Results:** Following the diagnosis of voluminous ovarian cyst, the patient received a recommendation of a 2 month long medication therapy, with unfavorable results, thus a surgical treatment has been recommended. The intraoperative diagnosis is that of voluminous right paraovarian cyst and a total cystectomy was performed. **Conclusions:** Although ultrasonography has an undisputable role in the diagnosis of abdominal tumoral masses, it has numerous limitations concerning the accurate localization of the tumoral origins, as well as the differential diagnosis between benign and malignant tumors.

Keywords: adolescent, tumoral, abdominal pain, paraovarian cyst, ultrasonography

HEMOPHILIA A WITH A RARE PRESENTATION OF KNEE HEMARTHROSIS IN A YOUNG MALE CHILD

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Background: Hemophilia is an X-linked congenital hemorrhagic disorder due to coagulation factor VIII (Hemophilia A) or factor IX (Hemophilia B) deficiency. The most common symptom of hemophilia is uncontrollable bleeding: haemarthrosis and muscular or mucosal bleeding and life-threatening bleeding episodes. The positive diagnosis of congenital hemophilia involves a detailed history with a focus on family history, clinical examination and hemostasis tests in a performing laboratory. **Material and methods:** We present the case of a 1.6-year-old male patient, with a history of multiple bruises and hematomas with onset after microtrauma and recurrent epistaxis. He presented to the emergency department for painful swelling on the left knee joint, with functional impotence, which occurred in a state of apparent health. **Results:** He was hospitalized with the suspicion of septic arthritis and intravenous treatment was administered, subsequently it was decided to install a central venous catheter, after which the appearance of a massive supraclavicular hematoma was observed. He was transferred to the Department of Pediatric Hemato-Oncology with the suspicion of a coagulopathy. **Conclusions:** Based on laboratory tests (factor VIII activity <0.6%), the diagnosis of severe hemophilia A was confirmed, and substitution therapy with Factor VIII was initiated, with favorable evolution.

Keywords: child, hemophilia, bleeding

SARS - COVID-19 : THE BIG CHALLENGE OF YEAR 2020

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Background: The new Corona virus pandemy is, by far, the biggest challenge of 2020. With a rapid global extension, SARS -COV 2 took the world by surprise and all countries, developed or poor, faced the cruel truth that they were not enough prepared to fight against this treacherous enemy. Although the adults seemed to be more affected, several cases of severe inflammatory response have been reported in children. **Material and methods:** We present our experience with corona virus infection in 2 period of time: the first interval, from 12/04/2020 to 30/05/2020, during the "first wave" of pandemy, when patients infected with SARS-CoV2 were treated in paediatric department, in isolation, alongside with other patients. The second interval, from 01/06/2020 until now, when we have tested all admitted patients, but not treated them if corona virus infected. They were discharged home if no symptomatic, or transferred to Infectious disease hospital, if presenting with alarming symptoms. For the first group, we used a Real time PCR. Kit COVID-19 GENESG Assay kit IVD, system 7500Fast Dx. Real-Time PCR, Soft:Software v2.3, provided by Genetics laboratories of UMFST For the second group, we have used RT-PCR SARS-CoV2. Kit RaqPath COVID-19 CE-IVD RT-PCR kit, System Quantstudious 5Realtime PCR , provided by hospital laboratories. **Results:** In the first group entered 17 patients. In the second group entered 17 patients. The main symptoms in group 1 were respiratory, but also fever, abdominal pain, weakness, and loss of smell and taste were noted. We performed tests on admission and during the hospital stay and, all patients were treated according to the protocol recommended at that time. Only 2 cases experienced a severe respiratory distress, and a need for supplemental oxygen, all the other patients had only minor symptoms, but, in the a end, all cases had a good outcome. **Conclusions:** Infection with the new corona virus affects children as well as adults, but severe cases rarely appear in children Diagnosis is based on real time PCR from nasal swabs, not a very pleasant examination for babies.. All children included in this study have had a good outcome

Keywords: corona, Real Time PCR, children

ULTRASOUND IN HIP DEVELOPMENT DISPLASIA

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Background: The diagnosis in hip development dysplasia was initially based only on clinical criteria, but ultrasonography quickly gained a well-deserved place, since the description and implementation of the examination method by Reinhard Graf in 1980. Ultrasound examination of the hip in the newborn and babies is used for diagnosis, staging, and monitoring of the treatment of hip developmental dysplasia (D.D.S.) **Material and methods:** The probe used is a linear transducer with a frequency of 7.5 - 10 MHz. There are 2 techniques: static and dynamic. The method we use is the static one, described by Graf - it involves the study of a single representative image for the joint. The sequence of examination is: morphological study of the joint, than the measurement of some angles and finally, comparing the values with a nomogram. Elements of identification of the reference image are: 1. The lower edge of the iliac bone, 2. The plane of the external surface of the coxal bone, parallel to the transducer, 3. The acetabular labrum. Reference lines: a. Baseline - along straight contour of iliac cortex b. from promontory along acetabular roof to describe the alpha angle c. from promontory to tip of labrum for beta angle. The angles used to assess the coxo-femoral joint are alpha - the bone coverage angle and beta - the cartilaginous coverage angle. Normally the values considered physiological are: alpha > 60 ° and beta 55 °. The measurement variations of the angles alpha and beta, between 2 evaluators, must not exceed 4 °. **Results:** In the population groups subjected to the screening, after 12 weeks of life, off-center hips can no longer be found (Schuler P et al). Most cases of DDS detected are type II, type III and IV are very rare, 0.3% each (Szoke and all). Treatment will be shorter, with better effects and fewer complications if the diagnosis is early. In the screened population, therapy is started in the first 12 weeks of life in more than 90% of patients. **Conclusions:** Early diagnosis of DDS allows early initiation of therapy. Where no screening is performed, only 32% of patients receive early therapy.

Keywords: hip development displasya, pediatrics, ultrasound

COMMUNICATION IN PEDIATRICS – A PATHWAY TOWARDS THE PATIENT'S BEST OUTCOME

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Background: The communication in pediatrics is one of the most important clinical functions and definitely a hallmark for the patient's outcome. The objective of this study was to assess potential communication barriers that might occur in terms of communication in pediatrician's daily practice. **Material and methods:** We performed a prospective study by applying a questionnaire on 110 parents admitted with their children in the Pediatrics Clinic 1 between July-August 2020. This questionnaire consisted of 28 questions meant to assess the parents' satisfaction in terms of communication with medical staff, the level of care provided and to identify the potential communication barriers that might occur. The questionnaire was applied to all parents that agreed to the participation in this study. **Results:** Most of the parents were aged between 30-40 years (56%), of whom 40.91% with superior studies, and 53.6% originated from the rural area. The majority of children were admitted for an acute pathology (85.5%), and 30.9% were infants. Analyzing the parents' answers, we noticed that 45% considered the pediatrician's attitude, empathy and attention for the child's complaints were excellent; 40% labeled the communication between the medical staff and their child as excellent; 35% were fully satisfied regarding their communication with the pediatrician; 40% stated that the amount of time spent by the pediatrician with their child was good; 35% felt their concerns understood; and 40% considered the time spent by the pediatrician to answer their questions to be good, appreciating the clarity of the answers. The parents' educational level significantly influenced the communication with the pediatrician and the perception of the provided answers ($p=0.015/p=0.031$). **Conclusions:** The physician's awareness regarding the value of communication and its potential barriers might definitely improve the patient's outcome.

Keywords: communication, pediatrics, outcome

THE DICHOTOMOUS ROLE OF OVERWEIGHT IN PREVENTING OR PROMOTING CHILDHOOD OBESITY

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Background: Overweight and obesity are two major current public health problems worldwide, being defined as excessive or abnormal fat accumulation with negative short- and long-term impact on human's wellbeing. The objectives of this study consisted in assessing differences between anthropometric, low-grade systemic inflammation, liver impairment and atherosclerotic risk in overweight versus obese children. **Material and methods:** We performed a prospective study on 132 children, with the age between 5 and 18 years, who were divided into two groups depending on body mass index (BMI): group 1, obesity group included 76 obese children, and group 2, overweight group - 56 overweight children. All children underwent were assessed in terms of anthropometric, laboratory and elastography parameters. **Results:** Anthropometric parameters were noticed to be significantly higher in obese children versus overweight ones (BMI percentile - $p < 0.0001$, BMI z score - $p < 0.0001$, mid-upper arm circumference - $p = 0.0008$, tricipital skinfold thickness - $p = 0.0317$, abdominal perimeter - $p < 0.0001$, and bitrochanteric perimeter - $p = 0.0103$). In terms of laboratory parameters, higher levels of leukocytes, lymphocytes and liver transaminases were noticed in obese children as compared to the overweight ones ($p = 0.0345$, $p = 0.0103$, $p < 0.0001$, $p = 0.0008$). Similarly, liver stiffness values (E median) were significantly increased in group 1 ($p < 0.0001$). We noticed a significant positive correlation between BMI and neutrophils, neutrophil/lymphocyte ratio, erythrocyte sedimentation rate, glycemia, anthropometric parameters, and E median ($p = 0.0007 / < 0.0001 / 0.0018 / 0.0044 / < 0.0001 / < 0.0001 / < 0.0001 / < 0.0001 / < 0.0001 / 0.0204$); and a negative one with lymphocytes and HDL-cholesterol ($r = -0.2747 / -0.2181$, $p = 0.0116 / 0.0120$). **Conclusions:** Based on all the above-mentioned differences between overweight and obese children, we might state that overweight is an ideal opportunity for preventing childhood obesity if managed appropriately.

Keywords: overweight, obesity, children, systemic inflammation, liver stiffness

CENTRAL-LINE ASSOCIATED BLOODSTREAM INFECTION IN A PATIENT WITH ACUTE LYMPHOBLASTIC LEUKEMIA

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Background: Central-line associated bloodstream infections (CLABSIs) are an important cause of morbidity and mortality, especially in severely immunocompromised hosts. Malnutrition, neutropenia, and other immunodeficiencies, bone marrow transplantation, loss of skin integrity all represent intrinsic risk factors for CLABSIs. A biofilm, made of fibrinogen, fibrin and glycocalyx may cover the internal and external surfaces of the intravascular device and play an important role in the colonization process. Coagulase-negative staphylococci, Staphylococcus aureus, enterococci, candida species, Klebsiella and other Gram-negative aerobes can colonize or produce nosocomial blood stream infections. Sources of infection can be the skin, intraluminal or hub contamination, infusate contamination or hematogenous seeding. The type of catheter material, conditions of insertion, catheter-site care, location of catheter are extrinsic risk factors for CLABSIs. **Material and methods:** We present the case of a 13-years-old boy diagnosed with acute lymphoblastic leukemia who developed a central-line associated sepsis with Coagulase-negative Staphylococcus. **Results:** A 13-year-old boy, was admitted to the hospital for fever, repeated upper respiratory infections, bone-pain, fatigue and anorexia with pallor. Physical examination reveals a dystrophic feverish child with lack of energy, pallor, laterocervical lymph node enlargement, slight splenomegaly. Based on laboratory investigations which showed leucocytosis $21,4 \times 10^3 / \mu\text{L}$, raised LDH (582 U/L), ESR (72 mm/h) and PCR (1,89 mg/dL), splenomegaly on abdominal ultrasound examination, 66% L1 FAB-type lymphoblastic infiltrate in the bone marrow, precursor B lymphoblasts on immunophenotyping, a diagnosis with acute lymphoblastic leukemia with precursor B cells was set. After 2 years from the insertion of a port-a-cath type central-line, he developed a catheter-related sepsis with Coagulase-negative Staphylococcus and relapse of his leukemia, associated

with an expressed non-compliance with maintenance-therapy. The central line was removed and after the healing of the sepsis, a new catheter has been inserted. **Conclusions:** We presented the management of a central-line related sepsis and highlighted the preventive measures.

Keywords: central-line, infection, coagulase-negative Staphylococcus, lymphoblastic leukemia, fever

PHARMACY

DEVELOPMENT OF A SIMPLE LC-MS/MS METHOD FOR THE DETERMINATION OF POLYUNSATURATED FATTY ACIDS FROM HUMAN RED BLOODCELLS AND PLASMA

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Background: LC-MS/MS is a technique increasingly preferred and used for quantification of both endogenous and exogenous compounds from different biological matrices for many purposes such as biomonitoring, bioavailability and other types of clinical and preclinical studies, as well as for diagnostics. The aim of the study was to develop a reliable, sensitive and selective LC-MS/MS method to determine eicosapentaenoic (EPA), docosahexaenoic (DHA) and arachidonic acid (AA) from human plasma and red blood cells (RBC). **Material and methods:** An LC/MS system consisting of a Perkin Elmer FX-10 liquid chromatograph coupled with an AB Sciex 4600 Triple-TOF mass spectrometer was used. Analytical separation was performed by using a mobile phase composed of 15% ammonium formate 10 mM and 85% acetonitrile on a Kinetex XB-C18 analytical column. Plasma samples were processed by using protein precipitation with acetonitrile, while RBC samples were hydrolysed using 10% hydrochloric acid and fatty acids extracted with hexane. After negative ESI ionization of analytes, the MS detection was performed by monitoring specific m/z ion fragments for each of the three analytes and for the isotopically labelled internal standard. **Results:** The MS detection was optimized for the analytes and internal standard. Chromatographic separation of the analytes and internal standard was achieved. The method was linear over a calibration range of 1-50 µg/ml AA for RBC and 2.5-125 µg/ml AA for plasma determination, and over a range of 10-500 ng/ml both EPA and DHA from RBC and 50-2500 ng/ml from plasma. The method was validated with regards to all critical parameters. **Conclusions:** A simple, robust, sensitive LC-MS/MS method was developed for the determination of PUFA from human plasma and RBC samples. The sample preparation is simple and inexpensive and the method was validated. The method can be used in routine analysis.

Keywords: LC-MS/MS, PUFA, RBC, Plasma

PUBLIC HEALTH

ASSESSING AGEIST BEHAVIOURS AMONG YOUNG ADULTS IN ROMANIA

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Background: Assessing ageist behaviours among young adults in Romania Gasparik A.I., Hompoth K, Ceană D, Moldovan I, Buicu F. In a time of rapidly aging population, "ageism" is increasingly recognized as a public health issue and as one of the most prevalent forms of stereotyping, prejudice and discrimination. Although it can affect any age group, older people are at higher risk of suffering from its consequences. **Objective.** To evaluate the magnitude and particularities of ageist behaviours among young Romanian adults. **Material and methods:** We designed a Hungarian language questionnaire (with 24 multiple choice questions) and administered online to 653 young adults (average age 34) living in 15 countries in order to gather information about the attitudes to aging among them. **Results:** We identified specific concerns and compared attitudes based on education, urban-rural settings or culture (living in central-, or western countries). 68%-72% of the participants reported some degree of negative ageist views or behaviours (stereotyping or prejudice). However, 85% declared to have fun in communicating with them, 62% of the respondents would not prefer to have an older adult (70+) as a superior at their job; 58% would choose not living in a multi-generational household. **Conclusion** Responder young adults living in Romania or Hungary are more engaged in ageist behaviours than their colleagues living in Western-European countries. **Conclusions:** Responder young adults living in Romania or Hungary are more engaged in ageist behaviours than their colleagues living in Western-European countries. We hope with this survey to increase awareness of the issues linked to this kind of discrimination that can have an impact on older people's functional and cognitive performances, marginalization and feelings of loneliness, particularly worsened by the Covid-19 pandemic.

Keywords: Ageism, Elderly, Marginalization

SURGERY

TWO-STAGE HEPATIC RESECTION WITH PORTAL BRANCH LIGATION IN THE TREATMENT OF LARGE LIVER METASTASES OF RECTAL CANCER

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Background: Liver resection is the only treatment with curative potential for both primary and secondary hepatic malignancies. Increasing the resectability rate of bulky tumors initially considered inoperable and decreasing the postoperative mortality and morbidity can also be achieved by portal branch ligation followed by two-stage liver resection. **Material and methods:** We present the case of a patient with stenotic rectal cancer penetrating the bladder, with multiple hepatic metastases in the right lobe. We performed Hartmann-type rectosigmoid resection with terminal colostomy, partial bladder resection and ligation followed by sectioning of the right portal branch. **Results:** Postoperatively, the patient underwent cytostatic treatment. Right portal branch ligation was followed by right hepatic lobe atrophy and left lobe hypertrophy, volumetric changes being confirmed by computed tomography. Right hepatectomy was performed six months after portal ligation. The postoperative evolution was favorable, with the patient being discharged on the 8th day postoperatively. **Conclusions:** Selective portal branch ligation leads to tumorous lobe atrophy and compensatory hypertrophy of the contralateral lobe. The procedure can be performed in cases of unresectable large liver tumors due to a remaining liver parenchyma considered insufficient to maintain liver function. The technique increases the resectability rate with low mortality and morbidity rates.

Keywords: liver metastasis, portal branch ligation, two-stage liver resection

THE IMPORTANCE OF NEUTROPHIL-LYMPHOCYTE RATIO IN GASTRIC CANCER EVOLUTION

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Background: The neutrophil-lymphocyte ratio(NLR),a marker of the systemic inflammatory response, has been reported to be a prognostic factor in several types of cancer. An elevated NLR has been described to be associated with gastric cancer progression.The aim of this study was to evaluate the importance of the preoperative NLR in patients with gastric cancer. **Material and methods:** We conducted a retrospective study between 2013 and 2019 that included 185 patients who underwent resection for gastric cancer in our clinic. The cut-off value of preoperative NLR was 3.34. High NLR group included patients with NLR above 3.34. We statistically analyzed the correlation between NLR and survival,tumor infiltration,age,TNM stage. **Results:** From 134 men and 51 women(mean age:65.74 years±SD 9.667) accordind to TNM staging 34,3% were stage 1-2 and 65,7% were stage 3-4. We obtained a statistically significant difference regarding survival (p=0.02,CI:95%) between high NLR group (a high number of patients died-37.3%) and low NLR group(29.7%deaths). We did not find a statistically significant correlation between NLR and degree of tumor infiltration. **Conclusions:** Neutrophil-lymphocyte ratio is an easy method for predicting overall survival in gastric cancer patients submitted to curative resection. Preoperative NLR can be an important prognostic marker in gastric cancer .

Keywords: prognosis, neutrophil-lymphocyte ratio, gastric cancer

CLINICAL AND SURGICAL APPROACH OF ACUTE AORTIC SYNDROME

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Background: This paper aims to highlight cases treated with acute aortic syndrome and acute abdominal aortic aneurysm during the period 01.01.2017-30.09.2020, at Emergency Institute of Cardiovascular and Transplant Târgu Mureş. **Material and methods:** Between 01.01.2017 and 30.09.2020, 181 patients were hospitalized at Emergency Institute of Cardiovascular and Transplant Târgu Mureş with acute aortic syndrome and acute abdominal aortic aneurysm. 101 patients were operated for acute aortic dissection (AAD) Stanford A, 45 patients for abdominal aortic aneurysm and 34 patients with AAD Stanford B received endovascular treatment. Because they refused surgery two patients died before any invasive treatment. **Results:** From 181 who received treatment for acute aortic dissection Stanford A, Stanford B and ruptured abdominal aneurysm, 74% (n = 134) were male and 26% (n = 47) were female and predominantly between 60 and 69 years (n = 56). Patients in 5th (n = 36) and 6th decades of life (n = 47) being the following dominant age groups in the examined group. The year 2018 registered the most treated cases (n = 56) and at the opposite pole 2020 (n = 30). Most cases were acute Stanford A aortic dissection (n = 101) followed by ruptured abdominal aneurysm (n = 45) and then by acute aortic dissection Stanford B (n = 34). The most common surgical procedure was replacement of the ascending aorta with the Dacron prosthesis (n = 52). The survival rate on acute aortic syndrome is 70%, consistent with specialized studies. **Conclusions:** Our study provides an insight into the treatment of acute aortic syndrome, a complex pathology with a major impact on life expectancy.

Keywords: acute aortic syndrome, acute abdominal aortic aneurysm, surgery, endovascular treatment, complex pathology

UROLOGY

ALTERNATIVE INTERPRETATION SYSTEMS IN PD-L1 IMMUNOHISTOCHEMICAL ASSESSMENT USING CLONE 22C3 IN PATIENTS WITH RADICAL CYSTECTOMY PERFORMED FOR UROTHELIAL CARCINOMA

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Background: PD-L1 immunohistochemical assessment is compulsory for initiating immune checkpoint inhibitor therapy in metastatic urothelial carcinoma (UC) patients. The PD-L1 22C3 clone interpretation is performed using the combined positive score (CPS). However, because of tumor heterogeneity, the CPS can sometimes be difficult to assess. We performed a transversal cohort study aiming to evaluate the role of positive-PD-L1-staining TC or IC or either of the two in 22C3 PD-L1 assessment using the CPS as a gold standard. **Material and methods:** Sixty nine patients with radical cystectomy performed for muscle-invasive UC in the Urology Department, Târgu-Mureş County Hospital (România) and Centre Hospitalier Lyon Sud (France) were included in the study. PDL-1 status was assessed. For each case, the CPS was applied with the positive cut-off value set at 10. The percentage of PD-L1 positive TC and IC was also evaluate and the threshold determined using ROC curves. After considering either positive TC or IC for a positive case, we compared its agreement to conventional CPS using Kappa statistics. **Results:** Positive TC staining percentage alone had an Area Under the Curve (AUC) of 0.947. ROC analysis revealed a threshold of 12.5% (82.1 % sensitivity and 97.6% specificity). IC staining alone had an AUC of 0.784. ROC curve analysis found a positivity threshold of 12.5% that corresponded to a sensitivity of 60.7% and a specificity of 80,5%. By considering either a positive TC or a positive IC to classify the case as positive, we obtained a substantial agreement of 0.77 to CPS on Kappa statistics. **Conclusions:** PD-L1 immunohistochemical assessment using either the individual TC or IC staining as well as their combined application is feasible, but the result is inferior to the conventional CPS score. However, using just the TC for diagnosis is a potentially helpful tool in cases when CPS score is difficult to apply.

Keywords: PD-L1, immunohistochemistry, Metastatic bladder cancer, 22C3

3D LAPAROSCOPIC RADICAL PROSTATECTOMY IN A YOUNG PATIENT WITH PROSTATE CANCER (CASE PRESENTATION)

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Background: We present the case of a 60-year-old patient who was admitted to the Urology Clinic from Tg. Mureş with the diagnosis of prostate tumor cT2bN0M0. **Material and methods:** Examination of the pelvic MRI reveals a prostate of 80 cm cubic with regular contour, in the transitional and peripheral area of both lateral lobes, low signal lesions in T2 images with diffusion restriction, nodules with a maximum diameter of 8 mm, without extracapsular extension; there are no inguinal, obturator or iliac nodules; normal seminal vesicles. Prostate biopsy reveals a prostate adenocarcinoma of the left lobe, median, Gleason score 3 + 4 = 7, grade group 2, PSA = 10.17 ng / ml, IPSS = 29, flattened uroflowmetry curve, Qmax = 8 ml / s, PVR = 150 ml. **Results:** We performed radical prostatectomy with preservation of the right neurovascular bundle and bilateral ilio-obturator lymph node dissection. The patient's evolution was favorable, with no intra- or postoperative complications and was discharged on the 5th postoperative day. **Conclusions:** Laparoscopic prostatectomy is the optimal choice for the prostate cancer curative treatment with rapid recovery of the patient, reduced hospitalization days and minimal intra- and postoperative complications.

Keywords: radical prostatectomy, laparoscopic, prostate cancer

THE MOST COMMON UPPER URINARY TRACT COMPLICATIONS AFTER THE TREATMENT OF CERVICAL NEOPLASM AND THEIR MANAGEMENT

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Background: The cervical neoplasms occupy the 2nd place after the breast cancer worldwide amongst women in terms of its incidence. The treatment strategy depends on the stage of the cervical cancer including (surgery, radiotherapy and chemotherapy). Following the treatment a number of urological complications can appear in time. The topic of our study is to assess the upper urinary tract complications of cervical cancer treated female patients. **Material and methods:** The retrospective study (2015- 2019) is processing the data of those female patients who were treated for cervical cancer and there evolution showed upper urinary tract complication followed by active urological surgical management. **Results:** Of the 166 (100%) identified cases, 89.7% presents upper urinary tract complications. The average age of our patients is 58.26 years (35-87 year). The most frequent identified upper urinary tract complication were the uretero- hydronephrosis with renal failure, in 88% of the cases. The cause of upper urinary tract dilatation were identified at the combination between surgery and radiotherapy (31.5%), followed by the combination of surgery, chemo and radiotherapy (18.7%), radiotherapy alone was identified in 9.4% of the cases. The approximate time between the onco-surgical treatment and the appearance of complication was about 61 months (1- 360 mo). Regarding the treatment of complications in 51 (3.3%) cases was performed percutaneous nephrostomy, in 44 cases (29.5%) double J stent insertion, in 5 (3.3%) cases percutaneous nephrolithotomy, in 3 (2%) cases ureterostomy and in 4-4 (2.6%) cases nephrectomy. At the presentation most of the patients presents an affected renal function (pConclusions: Based on the results, we observed that there is a strong correlation concerning upper urinary tract complications and the stage of Colum carcinomas as well as treatment modalities. In some of the cases despite of the fact that they are considered oncologically cured, emergency treatment and long follow up are required.

Keywords: uretero- hydronephrosis, cervical neoplasm, urological complications

**SCIENTIFIC SESSION OF UNIVERSITY ACADEMIC STAFF.
SCIENCE AND TECHNOLOGY**

ECONOMICS

EUROPEAN HEALTH UNION: COMMON HEALTH THREATS ASK FOR COMMON HEALTH SOLUTIONS

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Background: Background: The coronavirus pandemic is causing a huge impact on people's health, way of life, jobs, businesses, freedoms, and a huge pressure on national public policies and national health systems. The official data and the scientific literature reveal that during the COVID-19 pandemic, starting with the outbreak in Europe, the European Member States took very different national, uncoordinated measures to protect their inhabitants and economies with different results. The study aims to examine the national different measures in the European Member States to overcoming the pandemic, to assess their efficiency and effectiveness, and to point to the need of the health systems coordination in the EU. **Material and methods:** Considering the urgent need of finding a solution to the pandemic, and the important role of the coordination at European level, the study aims to offer an overview of the different national anti-pandemic measures in different European member States, to assess the efficiency and effectiveness and to offer arguments for creating a European Health Union. The study finds the strengths, weakness, opportunities, and threats of the national European health systems facing the pandemic crisis in 2020. The study uses official European and national data. **Results:** The study has identified and compared the uncoordinated national measures of the European Member States in their fight against the pandemic and assessed the policies results in terms of health and economic efficiency and effectiveness. Public health policies need to be coordinated to obtain better results and to reduce the negative effects on people, business and economies. **Conclusions:** Public health policies need to be coordinated to obtain better results and to reduce the negative effects on people, business and economies.

Keywords: Public Health Policies, Public Health Coordination, pandemic

LAW

CONSIDERATIONS ON THE EFFECTS OF THE BREAK OF THE MUTUAL PROMISE OF MARRIAGE

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Background: Background: The Civil Code regulates in Article 266, paragraph 1, of the Civil Code as the mutual promise of marriage. The mutual marital promise shall be subject to the substantive conditions for the conclusion of the marriage, except for medical advice and the authorization of the supervising court. The termination of the login shall not be subject to any formalities and may be proved by any means of proof. Matherial and metods: Using the logical, comparative and experimental methods, the study will analyse the legal provisions currently in force taking into account the point of view expressed in doctrine and judicial practice. Results: The effects of the breaking of the mutual promise of marriage are the restitution of gifts and the responsibility for breaking this promise. Thus, the return of gifts may be requested only if they were received on account of the breaking of the promise of marriage or during the course of the marriage, except for ordinary gifts, and liability for the breaking of the promise of marriage may be incurred solely for the payment of expenses incurred or incurred in connection with the marriage, in so far as they are appropriate to the circumstances, and for any other damage, including non-patrimonial damage. Conclusions: The study contains concrete and motivated proposals to amend the legal provisions currently in force.

Keywords: mutual promise of marriage, the restitution of gifts, marriage

NEW TRENDS IN HUMANITIES

FILMS AND VISUAL CULTURE

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Background: Sports can reflect both cultural differences as well as cultural connections between two societies and peoples. Despite the title "Mr. Baseball" (1992), the film is not regarded as a baseball movie. The holistic approach will focus on significant elements of human social behavior, material culture, and cultural diversity studied as adaptations to social and environmental change - past and present. Baseball is the pretext to catch a glimpse of the clash between the Asian and American cultures, how to grow mature at an old age, and of contrasting mentalities, from a personal and professional perspective. While individualism applies to American culture and baseball, groupism is a feature of Japanese culture. The paper's conclusion will highlight the equal importance of cultural groupism and individualism, which, used effectively, could be very successful.

Keywords: visual culture, film, individualism vs. groupism, contrasting mentalities, bridging the culture gap

POLITENESS, LINGUISTICS, AND INTERCULTURALITY IN ANAMNESIS - THE CASE OF ROMANIAN LANGUAGE FOR DOCTORS

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Background: The study of Romanian as a foreign language by international students enrolled in English medical programmes, besides offering them the possibility to manage daily interactions, is professionally motivated by the students' need to attend clinical and practical internships and as such to engage in doctor-patient interactions. Therefore, the major objective of Romanian Language for doctors, an optional course addressed to students in years IV-VI of the MLE programme, is the practice of anamnesis. Certain differences related to the students' native cultures versus the Romanian culture, their mixed level of proficiency in general Romanian language (accuracy in oral expression), and the use of English as an interface for Romanian language acquisition for all the students, may raise a number of barriers to communication. The paper presents some elements of pragmatics (politeness, directness / indirectness), linguistics (synonymy and polysemy, negative transfer, calques) and intercultural competence that represent stumbling blocks in oral communication in Romanian for specific (medical) purposes through a case study: anamnesis taking in the CLIL optional course Romanian Language for Doctors.

Keywords: Romanian language, Romanian for medical purposes, linguistics, pragmatics, intercultural communication

USING LAW-RELATED MOVIES AND SERIES IN TEACHING ENGLISH FOR LEGAL PURPOSES

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Background: Teaching a foreign language at the university level involves students' introduction into the terminology related to their main field of study. In this endeavor, language educators need to constantly motivate and stimulate learners by using up-to-date teaching methods and materials. This article intends to analyze the way law-related movies and series can be used as effective and inspiring materials in teaching English for Legal Purposes (ELP). Given the general positive feedback from the students who can better contextualize legal terminology when watching law movies or series, we can conclude that the use of cinematic resources is a viable didactic approach in ELP teaching.

Keywords: ESP (English for Specific Purposes), ELP (English for Legal Purposes), law movies and series, teaching methods,

materials

THE ROMAN CAVALRY MASKED HELMETS, BETWEEN PROTECTION AND PARADE.

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Background: One of the most impressive Roman military equipment items was the masked helmet used especially by the cavalry. These objects rose many debates and questions due to their design and places of discovery. Were they used in battle or just in parades and in the so called *hyppika gymnasia*? Did they assured a certain level of protection and visibility for the rider or they just were used as a psychological effect on the enemy? Did they had a certain religious/apotropaic significance? The paper has as aim to present the main typologies of these cavalry helmets, and the arguments *pro et contra* (some of them based on real life studies) on their utility.

Keywords: Cavalry, helmet, typology, battlefield, parade

MAPS AND GRAPHICS IN REBREANU "ADAM AND EVE"

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Background: The present study sets out the arguments that the Rebreanu novel "Adam and Eva" contain a narrative map which is interrelated with the main story ideas, but also with some exotic spaces. This creation of fictional spaces become a cartography, that reader is invited to discover. We will use the instruments of Digital Humanities, for showing how the map works in this novel. The research is divided in two sections: one is about explain how the map that Rebreanu has sketch in his manuscriptum fonction and the second it is about the literary space and the geographical points indicated in this text.

Keywords: maps, narrative, Digital Humanities, novel, literary Space

USING DISCOURSE TO IDENTIFY LANGUAGE DEFICITS IN THE SPEECH OF AN APHASIC PATIENT

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Background: Communication is an essential soft skill in maintaining solid and long-term relationships with others. According to Holmes J. (2001), communication is important in establishing and maintaining social relationships, in sharing feelings, and in expressing the identity of an individual.[1] Unfortunately, in certain cases, communication can be disrupted due to a certain illness or language disorder which has a serious effect on people's lives. One of the language disorders that greatly affects people's capacity to communicate is aphasia. Aphasia can affect their ability to express their thoughts and ideas, but also to understand what they are being told to. More, their reading and writing skills can also be disturbed, thus these patients often feel neglected or abandoned. This study aims to investigate the case of a single aphasic patient, diagnosed with Wernicke's aphasia and highlight the importance of discourse and discourse analysis as an aid for studying aphasic language deficiencies. [1] Holmes J. (2001). An introduction to sociolinguistics (2nd ed.). Harlow, UK: Pearson Education.

Keywords: Wernicke's aphasia, discourse analysis, communicat

A TRANSLATIONAL APPROACH TO THE EVOLUTION OF THE ROMANIAN NOVEL

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Background: The paper puts forward the project of reassessing the evolution of the Romanian novel through the lens of translation. It advances the concept of *translational literary history* in order to deconstruct the former organicist approaches to national literatures. Romanian literary studies have disregarded both the questions of translations and the systematic analysis of the impact of foreign literatures. In traditional literary histories, the system of translations has been examined separately from that of national production, by omitting the mechanisms of interference between the two. Conversely, our paper argues in favour of a systemic approach to the impact of translations on the Romanian novel, with the aid of two emergent approaches in the field of Humanities: Descriptive Translation Studies (Itamar Even-Zohar; Theo Hermans) and quantitative methods (Franco Moretti, Mathew L. Jockers).

Keywords: translational literary history, Romanian Novel, translations

RECONSTRUCTING MORETTI. ADVENTURES IN DISTANT READING

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Background: The paper discusses the evolution of Franco Moretti's thought over the last decades: starting from his breakthroughs in evolutionary and world-system literary theory in the 1980 and 1990's, to his pioneering contribution to distant reading and digital humanities in the years 2000's - which crowned him as 'the leading practitioner and theorist of distant reading' -, up to his recent disenchantment and growing skepticism towards the new paradigm, expressed in several essays and interventions published in these last few years. The paper will then try to explain or at least make some sense out of this tortuous path, by highlighting both the innovative perspective and contribution made possible by the research paradigm of distant reading, and its crucial shortcomings and structural limitations, especially in comparison to Moretti's own initial background and theoretical paradigm, i.e. Western Marxism.

Keywords: Franco Moretti, distant reading, digital humanities, quantitative analysis, evolutionary theory

TECHNICAL VOCABULARY AS PART OF THE ESP DISCOURSE: FROM THEORY TO PRACTICE

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Background: The problem of vocabulary is one of the most complex issues in the analysis of language discourses. Words are the basic components of all speech acts; used with adequate cohesive and coherent devices, they give meaning and specificity to communicative situations. In the context of Technical English, words are the carriers of both general (linguistic) and technical meaning. A good understanding and proper use of vocabulary items in the specific technical context is a sine-qua-non condition of a successful technical message. To properly convey meaning, to ensure exact illustrations of technical realities, one needs to be thoroughly aware of vocabulary peculiarities, of word formation rules, of syntax specificity and word translation challenges. Starting from the premises described in the background, the paper will tackle with the specifics of vocabulary as an essential constituent of technical discourses with illustrations from a variety of technical input material. Additionally, the paper will present modalities of practising technical vocabulary structures in a didactic context, together with the appropriate teaching methods relevant for this objective. The study will present a series of strategies intended to reinforce and consolidate technical vocabulary for engineering students studying English as a foreign language. The paper's results are intended to emphasize the role of vocabulary in the economy of English technical discourses, highlight some of the essential features which make it a vital element in technical communication and provide a scheme for the acquisition and practise of this language component.

Keywords: English for Specific Purposes, Technical Discourse, Vocabulary, vocabulary learning strategy, technical communication

FORAY INTO THE WORLD OF ABANDONED CHILDREN AND CHILD ABUSE. CASESTUDY

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Background: Our paper is focused on the evolution of child abandonment and violence against children phenomena in Romania and Mureș County. **Material and methods:** The methodology is based on processing and analyzing the official statistic data and annual reports provided by the competent institutions in child protection according to the following criteria: the age of the abandoned children, the environment they are coming from, the types of fostering and social services of which these children benefit, the place where they have been abandoned. **Results:** The child abuse, neglect and violence against them is analyzed according to the type of notification of these cases, by age, by gender, by the environment where they come from, by the place where the abuse occurred, and by the typed of abuse. **Conclusions:** A program to prevent child abandonment and violence should monitor the situation, should start with a real identification of their needs, analyze, make appropriate decisions and when the situation requires it, refer the case to the protection system.

Keywords: child., abandonment situations, risk of violence

DEVELOPMENT OF SOCIAL AND EMOTIONAL SKILLS (DECO - SE) CURRICULUM PROMOTES POSITIVE BEHAVIOUR IN PRESCHOOLERS

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Background: The study evaluated the effects of the Development of Social and Emotional Skills (DeCo - SE) project implementation aimed at promoting preschooler's social and emotional skills which valorizes socio - emotional education strategies and techniques, intervention strategies in reducing behaviour problems and strategies for solving interpersonal problems. Development of Social and Emotional Skills (DeCo - SE) curriculum was provided in Romanian to preschool teachers, in Tg. Mureș, România. The preschool teachers who were involved in the research first participated on a formative course called "Techniques and strategies used for the formation and development of social and emotional skills for preschoolers". During the course, teachers were taught different strategies to help with the development of social and emotional skills (identifying emotions, frustration tolerance), reducing behaviour problems and fixing problems between peers. The strategies were taught exclusively through direct instruction and role play. The Preschool and Kindergarten Behaviour Scale (PKBS-2) was used to assess 74 preschoolers behaviour changes over time at preschools participating in the DeCo - SE programme, compared with 72 children from a control group that did not participate to the programme. The data processing was done in different steps, while taking into account certain necessities in regards to verifying scientific criteria translated from Anglo-Saxon literature: faithfulness analysis, factorial confirmation analysis, power analysis, descriptive analysis and comparative analysis. After analyzing the values of the children's PKBS-2 scores, both for the independent samples and for the pair samples, for the two samples (experimental and control), we find the efficiency of the formative program, because for all the types of behavioral problems evaluated there is a decrease in the their intensity. The effectiveness of Development of Social and Emotional Skills (DeCo - SE) program in this situation is aimed at reducing behaviors considered undesirable / disadaptive.

Keywords: social, emotional, skills, development, curriculum

STORYTELLING, AS A TOOL FOR ESTABLISHING INDIVIDUAL AND COLLECTIVE IDENTITY AND FOR CONNECTING WITH ALTERITY

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Background: Storytelling is more than the need to share stories. Throughout history, as well as in the contemporary world, storytelling has been and continues to be a real, multi-disciplinary field of study, work, and action, but the value, importance, and

popularity of a story lies in the fact that regardless of the age, status, profession and affiliation of the narrator, it represents the device that offers one the possibility to manage one's own life, one's own cultural, social and professional identity, the global feeling of one's being in the world, and to relate correctly and adequately to otherness. The paper aims to provide an analysis of the purpose of the narrative and highlight its ubiquity, in order to show that the story was primarily part of life before finding exile in literature.

Keywords: storytelling, identity, alterity, literary narration, personal history

BUSINESS ENGLISH AS A FORM OF LINGUISTIC SPECIALISATION

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Background: Linguistic analysis and research have always sought to eliminate all subjective variations from the study of language and map out each and every portion, catalogue every region of information transference as schematically as possible. From a linguistic standpoint, it is easy to scientifically quantify communication and language objectively. Letters form words, words form sentences, sentences form phrases and the origin of words can be scientifically explained and mapped out. The human factor, however, is highly unpredictable and prone to elusive subjectivity. It is for this very reason that linguistic research appealed to the merits of neuroscience in order to objectively understand and describe the synaptic connectivity behind the generation and proliferation of linguistic response.

Keywords: Linguistic analysis, subjective variations, a linguistic response

TEMPORAL DEICTIC ADVERBS ATUNCI/ATUNCEA 'THEN' IN THE CURRENT SPOKEN ROMANIAN LANGUAGE (ROVA, IVRL, CORV, IV II CORPORA)

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Background: In his study, the author aims to seek the role and the position of the time adverb atunci/atuncea 'then' in the current spoken Romanian language. In addition to the conversational analysis, the author marks both the distribution within the sentences and the frequency of this deictic adverb quite important in language. To support his approach, for a larger objectivity, the author deploys corpora that are representative in Romanian language, for example, ROVA, IVRL, CORV, IV II, which certainly reflect the dynamics of today's Romanian language. The study is in attention the deictic adverbs atunci/atuncea and the semantics of these parts of speech.

Keywords: adverb, deixis, current Romanian language, corpus

SOMETHING ELSE IN TEACHING STRATEGIES IN HIGHER EDUCATION. INSIGHTS INTO AN ERASMUS+ PROJECT (III) ON THE USE OF SERIOUS GAMES IN LANGUAGE TEACHING

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Background: The present study is the third of a series of follow-ups, detailing on the findings of a student-focused survey we conducted within the Erasmus+ project ELSE, analysing the use of the Ecore tool (Serious Games approach) in the classroom by a number of selected students, completed by the teachers' experience in using technology-enhanced methods and their perception of innovation in education. As part of the ELSE project, our university actively participates in the application and testing of tools developed under the ELSE brand. In this article, we apply and exploit one of these tools, the Ecore tool, designed by the Entropy Knowledge Network team, partner in the ELSE consortium.

Keywords: Erasmus project,, technology-enhanced tools,, innova

THE SUBSTANTIVIZATION OF VERBAL PHRASEOLOGICAL UNITS: GRAMMATICAL AND LEXICAL MEANS

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Background: In the present paper we discuss the situation of those Romanian verbal phraseological units that can be transformed into noun phrases by different grammatical or lexical means. These can be illustrated through conversion (from infinitive to the so-called "long infinitive", which is a noun in Romanian; from supine to noun by means of definite article etc.), derivation, and ellipsis. These noun phrases can also become compound nouns. They do not lose their expressive feature, but they receive a rather abstract meaning or a general meaning. As a result of substantivization there are syntactic changes (e.g. from object to prepositional attribute). The process of substantivization has a systematic feature and it represents one of the inner methods of enriching Romanian phraseology.

Keywords: substantivization, phrasal unit, derivation, ellipsis, noun phrase

SEQUENCES FROM THE HISTORY OF MEDICINE IN THE OPINION OF ROMANIAN AUTHORS, AT THE BEGINNING OF THE XX CENTURY

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Background: This paper aims to analyze several works by some Romanian authors on the history of medicine. This topic was approached both by well-known historians (like Nicolae Iorga) and by some professors from medical schools (Felix Iacob, Samarian, etc.). Hence - the differences in conception and historical method: in those in the first category we notice a greater interest in vintage documents, in those in the second category - more of a narrative exposition, for the audience. My analysis tries to inscribe this subject in the evolution of Romanian historiography from the beginning of the 20th century, as well as to compare it with what we find in the same period of time, in the historiographies of the West.

Keywords: history of medicine, Romanian historiography, research topics, research results

FROM TRANSLATIONAL FIDELITY TO CREATIVITY: IN SEARCH OF LOST BOOK TITLES

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Background: The paper reflects our interest and research in the field of marketing translation and addresses the pragmatic nature of title translation for literary works, continuing the analysis of two translational pillars we work with, as employed in a previous study we published on film title translation. As such, "fidelity" and "creativity" would frame this dynamic artistic/creative exchange that authenticates the linguistic particularisation of textual titles as reader-oriented or content-oriented while making use of translation procedures/strategies and transitioning from a literal approach to an intertextual/symbolic one. To serve our purpose, we employ Newmark's and Jean-Paul Vinay & Jean Darbelnet's taxonomies that further various translation procedures.

Keywords: Newmark's taxonomy; Jean-Paul Vinay and Jean Darbe, The issue of translating book titles twines transl, marketing translation, translation procedures, aesthetic/informative/vocative functions

ICONOGRAPHY AS A HISTORICAL RESOURCE FOR WOMEN'S HISTORY. A STUDY CASE/IMAGINEA ȘI REPREZENTAREA FEMEILOR ÎN ARTA ROMÂNEASCĂ. ICONOGRAFIA CA ȘI SURSĂ PENTRU ISTORIA FEMEILOR

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Background: Iconografia reprezintă o sursă privilegiată spre care se apropie mai cu seamă istoricii mentalităților, preocupați de cercetarea unor subiecte care nu se lasă dezvăluite în documentele "clasice" ale istoriei. Mai mult, conform Simonei Nicoară, iconografia este un mijloc aparte de urmărire a relațiilor subtile dintre imaginar și realitate. Din perspectiva istoriei femeilor, imaginile rămân o sursă istorică insuficient exploatată de către istorici dar care poate să ofere întregiri documentare consistente pentru înțelegerea evoluției statutului lor în societate. Pornind de la aceste considerente, prezenta lucrare își propune să expună principalele direcții și teme de cercetare ale istoriei femeilor bazate pe aceste gen de surse istorice particularizat pe principalele reprezentări ale femeilor întâlnite în iconografia românească. Iconography has always been a privileged source for researching historical subjects that are not revealed in the "classic" documents of history. Moreover, according to Simona Nicoară, iconography is a special means of following the subtle relations between the imaginary and reality. In what the women's history is concerned, images remain an insufficiently exploited historical source by historians but which can provide consistent documentary completions for understanding the evolution of their status in society. Starting from these considerations, the paper aims to expose the main directions and research topics of women's history based on these kinds of historical sources. The approach is focused on the main representations of women as present in Romanian iconography. The study also brings in the foreground the main research themes that could be researched by using these types of historical records.

Keywords: arta, imagine, iconografie, reprezentare, femei

TRADITION AND MODERNITY IN THE POETRY OF ALEXANDRU MACEDONSKI

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Background: There is in the work of Alexandru Macedonski a tragic consciousness of some firmly drawn antinomies, in the spirit of a romantic rhetoric: illusion / reality, lucidity / chimera, will / fatality, desire for evasion / regression inwardly. The recurring topos summarize the vocation of a visionary poet, vitalist and artist, attracted by the contemplative refinement of emotion. Poet and theorist, we find in Macedonski a unique encounter of tradition with modernity, of romanticism with symbolism, even if the Romanian poet delimits himself from the French symbolists by energetism, by the synthesis of Dream-Will, even love being the expression of a vitalism of the communion of the senses and the spirituality.

Keywords: poetry, tradition, modernity, illusion, spirituality

THE ECONOMIC IMPACT OF THE CORONAVIRUS PANDEMIC THROUGH METAPHORICAL LENSES

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Background: Metaphors have proved essential and relevant tools for describing, explaining and understanding economic and financial crises throughout the years. The current coronavirus pandemic has presented a series of unprecedented challenges to our modern world in general and has had different effects on the world's economy in particular. Therefore, our paper takes a look at how the impact the pandemic has had on the global economy has been described by presenting some of the main metaphors that have been used to conceptualise and explain the situation. The paper adopts the corpus approach to metaphor analysis. Thus, a corpus of English articles covering economic and financial topics was created to identify, analyse and interpret the metaphors that depict the current economic reality.

Keywords: Coronavirus pandemic, conceptual metaphors, economic impact

ONTIC PAIN: "THE LIGHT INSIDE ME IS THREATENED" (AUREL PANTEA)

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Background: The hermeneutics of ontic pain (ontalgia), to which we resort, completes our semio-stylistic approach to Aurel Pantea's poetry. The Pantean "poetic body" confirms the trauma fuelled by the spasms caused by ontalgia, manifested through the "pain of being", for man is nothing but the being in suffering, and his existence becomes a way of salvation through Poetry. Despite the fact that he faces the absurdities of life, a recessive reality, the poet resorts to poetic meanings through which he attenuates the trauma, making bearable the anxiety of leaving for an imminent beyond. There is thus an obvious conciliation of the absurd with existence. Through cultural, intertextual references, through negation and denial, through paradox, metaphor, and symbol, the "poetic body", undoubtedly manifested as existential hunger, works like a defense meta-mechanism against ontic pain (ontalgia), projecting a redemptive ontic recovery through "o înserare nepământească"/ "an unearthly dusk".

Keywords: ontic pain (ontalgia), anxiety, absurd, paradox, intertextuality

NARRATIVES OF EUROPE. HISTORICAL WRITING ON EUROPE IN ROMANIA

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Background: The research focuses on representations of Europe that emerge from historical discourse, specifically from university handbooks on the history of European integration. The aim of this paper is to analyze the most important and widespread texts regarding the history of the European integration process, published since 1979, highlighting the specific aspects that characterized the relationship between the national context and the process of European integration. In our work, we have paid particular attention to the crucial steps in the process of European integration, as well as to the way in which these have been presented, emphasized or neglected by Romanian historiography.

Keywords: EU, European Integration, Romania, Historical Writing, European Union

METAPHOR IN MEDICAL TERMINOLOGY. CONTEXT AND STRUCTURE

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Background: Our research study started from the hypothesis that between medical terms in context and common language, in point of the expressed substance, there is a manifested continuity regarding the meaning of the term-word and the sense of the precise lexeme in the language. Focusing on the Romanian medical terms in context we have to admit the existence of certain tools in decoding medical discourse, acting as metaphors of the human body, having a specific semantic transfer in the anatomy, botany or neurology domains. Our following analysis is trying to shape a less explored issue in the literature, namely, the metaphor in terminology.

Keywords: medical terms, metaphor, polysemy, semantic transfer, medical discourse

UNRAVELING THE ONTOLOGICAL MAZE: I. NEGOIȚESCU

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Background: The present study starts from the premise that there are several contextualisation errors in the evaluation of I. Negoïtescu's work. In fact, biographical, temperamental, political, etc. contexts are either ignored or misinterpreted, to the same extent to which the organicity of his work and the relation between his life and his writings are overlooked. Even though the demonstration is not taken to its full amplitude, we try to demonstrate that I. Negoïtescu is a disciple of mannerism. The acute sense of oddness, the obsession with solitude and alterity, the inner void, the preoccupation with corporeality, the sensuality mirrored in his writings, the homoeroticism, all these converge effectively towards such a stance. On the other hand, still from a polemic perspective, the study questions the almost universally accepted opinion that Negoïtescu did not complete his work. On the contrary, our analysis of his History of Romanian Literature and Eminescu, the "themes" experienced obsessively by Negoïtescu from early childhood to his death, reveals the partiality of such an opinion. At the same time, searching for an organic unity of the reality we call Negoïtescu (life and work), the study proposes a dissociation between his Neptunian area, that is the ideology implied within successive phases of his creation (that are primarily identified), and his Plutonian area, the hidden personality that Negoïtescu himself discovers as he writes pages of his correspondence, diary, memoirs, etc.

Keywords: Negoïtescu, Eminescu, history of literature, mannerism, homoeroticism

ON DISCURSIVE RELATIVITY, DISEASE AND OTHER LIABILITIES OF MASS COMMUNICATION

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Background: In these times of crisis politics heavily influences communication through internet and television. Political discourse either anticipates, hides or subordinates political action. Mass communication is both a necessity and a challenge to be tackled with care, since it can turn out to be a great liability. With the message being broadcast worldwide new forms of regulation thus appear born in confinement and fear of the unknown. Public health becomes the major topic of the social debate, one that triggers new communication strategies and expressive patterns in both Europe and United States. which are to be considered in respect to taxonomy, recurrence and other specificities.

Keywords: political action, digression, public health, performativity, discursive strategies

THE MNEMONIC IMPACT IN MARIN PREDĂ'S DESCRIPTIVE RHETORIC

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Background: The study is focused on a series of essential sequences defining the narrative strategies in the descriptive rhetoric of Marin Predă's works. The chronotope most often triggers a recovery mnemonic impact, seen as an auctorial narrative perspective or as a neutral, behaviorist one, with various in-depth degrees and various orientation. The discursive strategies create a cultural

pattern where the moral dimension, dissimulation, contemplation but also patience, omission, procrastination and self-reflection become forms of existence. The external view - "outside in" grants meaning without necessarily triggering internal motivation. Even if the "reflectors" (having an autoscopic role) change the focus from the external author to the character, the prose of Marin Preda aligns to the Doric strategies. Both canonical and non-canonical, the prose of Preda focuses on an upside-down world model, where oblivion - "a code not to be de-ciphered" is reached through the "possible return" - a freeing therapy and adventure of the consciousness facilitated by the mnemonic impact triggering memories, where self-reflection is observed.

Keywords: mnemonic impact, discursive strategies, Marin Preda, narrative perspective, descriptive rhetoric

LEXICAL CREATIVITY IN TV JOURNALISM

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Background: The article analyses aspects of lexical neology, a phenomenon which highlights the speakers' limitless creativity, as the individual is the sum of his thoughts, life experiences and multiple feelings. The topic of our research pertains to lexical creativity in today's Romanian TV journalism. Journalistic creations are differently shaped (ranging from ludic, spontaneous, occasional to deliberate and conscious), they are sometimes subjectively motivated (this is not a novelty when it comes to social media which strives to impress, to be original). The novelty of the journales keeps the target audience attentive and interested. Linguistic creativity is influenced by different factors such as: analogy, calque, subjectivity, sensitiveness, global context, etc. Although they are originally the product of individual creativity, some words and phrases can spread very fast and can penetrate everyday language. I chose to explore the phenomenon of affixation and compounds and I selected neological forms recently borrowed into Romanian from other languages. Journalists borrow foreign words to which they attach classical or modern elements in their attempt to impress and be unique. In order to better organise this research we established two criteria (structural and stylistic), inside each criterion we also took into account the morphological subcriterion (which pertains to the lexico-grammar category). Referring to the corpus structure, for the written section we followed the original spelling of the source word, while for the spoken section of the corpus we opted to transcribe the words according to phonetic and phonological principles characterising Romanian and according to the current rules of forming plurals and to the use of articles with neologisms. (Dicționarul ortografic, ortoepic și morfologic al limbii române [DOOM2]).

Keywords: lexical creativity, TV journalism, expressiveness, affixation, compounds

DEVELOPING TRANSLATION SKILLS OF ENGINEERING STUDENTS WITH THE HELP OF MODERN TECHNOLOGIES

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Background: Correctness and accuracy are significant characteristics, particularly hard to accomplish when we need to deal with texts belonging to technical, engineering field, but it is precisely the high level of accuracy which differentiates technical translation from translation of other areas of knowledge. The present study attempts to highlight the advantages of using translation in a number of teaching activities and determine that it can contribute to both developing students' progress and to reducing reticence in foreign language learning. This paper also intends to provide information and evidence on how modern technologies can develop students' standards, which take account of the acquisition of skills related to the use of translation memories, databases and the Internet as a faithful source of getting information. Modern technologies can, simultaneously, turn out to be the perfect academic device for acquiring essential skills, such as the ability to learn independently or to carry out autonomous translation activities. Technology has had a huge influence on the translation strategies and on the way they can be developed during translation courses or seminars. All you need if you want to understand a message in a foreign language is an online translation device or a digital dictionary. Nevertheless, things change insofar as more complex documents are concerned and the present paper will also highlight the advantages and disadvantages of using such devices based on conclusive experiments carried out during translation seminars.

Keywords: translation, technology, accuracy, acquisition, competence

UNIVERSITY TEACHERS' INTEREST IN ENGLISH FOR ACADEMIC PURPOSES AS A WAY TO PROMOTE THE INTERNALIZATION OF HIGHER EDUCATION

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Background: University teachers have traditionally had to face constant social changes by being required to demonstrate a high level of updated knowledge in their field of research. This subject focused learning system has sometimes minimized the importance of methodological teacher training. In the process of internationalizing Higher Education foreign language learning plays a key role. Previous studies in English for Academic Purposes have focused on identifying the interest of specific groups of teachers in learning English. The present paper is aimed at presenting the case of the University of Cadiz (Spain). Our study comprised a survey on their specific EAP needs so as to help researchers and internationalization-CLIL stakeholders face the challenge of internationalization. Findings revealed their most recurrent interests are connected to everyday tasks they carry out in international contexts such as communicating with peers, participating in research-teaching programmes, presenting papers and attending conferences, in addition to having an official certificate of their FL level so as to facilitate entering CLIL (or EMI) programmes. Language policies, internationalizing strategies besides promotion requirements established in universities around Spain definitely play a significant role in defining professors' interest in EAP development, thus guiding EAP trainers on their syllabus design.

Keywords: English for Academic Purposes (EAP), Content and Language Integrated Learning (CLIL), Internationalization of Higher Education, Bilingual programmes, Foreign Language Testing

CREATIVE WRITING IN DIGITAL ERA. EXPERIMENT(S) (1)

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Background: Despite having been on the rise in the last thirty years as an interdisciplinary event, creative writing is just starting to look for its place in our country and in our university as an academic discipline between pedagogical practices and the tradition of the workshop model. Starting from the Anglo-Saxon studies on creative writing, we will propose an experiment of traditional writing face to face with digital creative writing searching the premise that creative writing can function only through creative (re)reading. The World Wide Web era and the accessibility of the Internet lead to a paradigm shift, especially regarding digital creative writing, in the relations between the traditional author-text-reader triad, the public, and its effect/ feedback being privileged. Using G. Genette's theses on the palimpsest text and the dialogue between texts, we will argue throughout an experiment and exercises proposed the study's own thesis: at all levels of transtextuality, (re)reading keeps the imagination alive, it continuously nourishes the mind with ideas and images. We will look for answers to the following problems: Is/ should creative writing be a form of artistic expression/ communication? How do creative writing and creative digital (re)reading (especially blogs) interact? How has the digital era shifted the balance between the creative process and the creative product? Is the creative process more important or rather the creative product? In teaching classic and/ or digital creative writing should the creative process or the creative product with commercial potential be privileged? We will propose a nine-week creative writing experiment, on the one hand with beginner students from our university, some philologists, other studying communication and digital media, on the other hand with 'artist' writers.

Keywords: creative writing, digital writing, multimodal literacy and successive variants Despite, transtextuality, efficiency of the public feedback

PACK UP, WE ARE MOVING ONLINE!

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Background: Once the World Health Organization announced that COVID-19 was a worldwide pandemic (March 11 2020), several countries turned to various forms of quarantine and lockdown measures were taken. As a result, various types of businesses and activities faced an unprecedented and sudden change. Education, on all of its levels, is probably the area that had to adapt to new realities in the shortest time interval. Both teachers and learners were unexpectedly faced with diverse difficulties and challenges. This paper aims to find ways to improve online adult teaching and learning and to suggest solutions to keep students motivated and involved in learning activities.

Keywords: online teaching, adult learning, course design, student motivation

DIGITAL HUMANITIES. STUDYING LITERATURE IN THE DIGITAL AGE

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Background: The paper follows the chronology of the concept of Digital Humanities in Romanian literary studies, focusing on the articles regarding it as well as on terminological correspondences, such as distant reading, computational analysis, quantitative research, etc. The new concept is situated in the area of world literature studies or polisystemic theory, being able to relaunch compared literature studies and open new perspectives upon some literary genres (like the Romanian 20th century novel). Another field of research that Digital Humanities may have a significant impact on is that of literary translations, revealing the differences between the produced literary works and the translated ones.

Keywords: Digital Humanities, Distant Reading, Franco Moretti, Computational Analysis, Novel

PROPER NAMES AND FICTIONAL NAMES

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Background: The paper Proper Names and fictional Names proposes an interpretation within a semantic framework of the logical status of proper names and fictional names. In doing so, it addresses proper names first, which are seen to be semantically unstructured, nondescriptive linguistic expressions, with no inherent meaning or sense. Their sole function is to denote an individual directly. They are rigid designators. In contrast, fictional names, which denote individuals in the worlds of fiction, are descriptive and function like variables bound by the existential quantifier. They are nonrigid designators. The topic proposed in this paper is supported by examples from different types of texts.

Keywords: proper names, fictional names, rigid designators, nonrigid designators, (non)descriptive accounts of proper names

LINGUISTIC CONSIDERATIONS ON ROMANIAN PHYTONIMS RELATED TO THE ELEMENT AIR

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Background: In the folkloric creations of the Romanians the air involves deep mythological implications. Our paper aims to reveal an inventory, an interpretation and a statistical analysis of Romanian names of plants which implicates the element "air", spread through the botanical terminology. We identify and analyze the phytonyms composed using "air" and its correspondences and their

implications in the respective language structures. The conclusion of our work is that once known, botanical lexicon of a specific region is not only a thesaurus but also a document of the resident population and places of the past. Our article focuses on a selected area of Romanian specialized lexicography and offers an insight into the recent lexicographic recording of Romanian plant names. Botanical popular terminology has primarily a practical value, designating, distinguishing and categorizing elements of the plant kingdom within the given natural reign, but also has a high theoretical significance, especially for linguists, both by the ethimons to which they send back and by the metaphorical meanings the phytonims mostly have. As it could be expected, Romanians have named many indigenous plants with equivalents of the air, which have undergone specific lexical transformations; those constitute proof that the respective terms have been in use in Romanian for a long time, and that phytonymy is a reliable source of linguistic "archaeology".

Keywords: Romanian Phytonymy, Ethnobotany, Linguistic Imaginary, Air, aer

SCIENCE AND TECHNOLOGY

STUDIES ON THE MEASUREMENT OF ESSENTIAL INDICATORS FOR MEASURING THERMAL COMFORT

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Background: How people feel comfortable in a certain space depends on a number of factors. Whether we are talking about thermal radiation or air currents, thermal comfort can be influenced by a number of different factors. Among them we can list: indoor air temperature and radiation temperature, air speed, relative humidity of indoor air. Of course, the human being can feel the feeling of comfort depending on the type of activity carried out, but also on the clothes. This paper evaluates what these factors are according to the International Standard ISO 7730, which details the parameters in the PMV / PPD measurement (Estimated Average Vote / Estimated Percentage Unsatisfied). The paper also studies how PMV (index that predicts the average value of the climate assessment of a large group of people) and PPD (the number of people who will be dissatisfied with a certain environmental atmosphere) can be identified with modern measuring instruments. There are a number of universal measuring instruments that evaluate IAQ by measuring, analyzing and documenting airflow, air pressure, IAQ and comfort level parameters, using a single set of instruments. Thus, with the help of these intelligent and intuitive measurement programs, including the measurement of the HVAC volume flow network according to ASHRAE 111, PMV / PPD and turbulence according to ASHRAE 55, high precision differential pressure sensors, air flow parameters can be identified comfortably IAQ by using probes attached to a measuring device and professional software.

Keywords: PMV, PPD, indoor air temperature, radiation temper

DORSAL HAND VEIN SEGMENTATION USING IMAGE PROCESSING TECHNIQUES

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Background: Biometric identification is gaining more and more importance especially with the widespread of advanced identification systems. The most known identification methods based on biometrics are face recognition, fingerprint, iris, palm vein or dorsal hand vein recognition or other physiological or behavioral characteristics. In this paper we detect dorsal hand veins right under the skin visible on near-infrared images. The most important segmentation methods are the feature- or texture- based methods. Here the segmentation is based on different geometric features like distance features, approximation of segments, derivatives, wavelets or morphology and others. In our work the segmentation is based supervised learning methods. The developed system needs a gold standard expert annotation in order to learn out of it. There are no publicly available dorsal hand vein expert annotated images. So, the major part of creating the training set was the series of experiments related to achieving the most adequate series of traditional image processing techniques to obtain the annotations used in further training. We have applied the following steps: image masking, image correction, gaussian filtering, inhomogeneity correction, contrast enhancement (CLAHE) and curvature detection. We have trained our system using deep learning techniques by implementing convolutional neural networks (AlexNet, UNET, VGG, SegNet, FNCNet and ResNet) and adapting them for our task of vein segmentation. The most import results obtained were based on Adadelta optimization using the Dice loss. We have also applied augmentation techniques, transfer learning and class frequency weighting. Thus, we managed to obtain an 88% segmentation accuracy so far. In conclusion we created an automated dorsal hand vein segmentation system that includes as the image labeling part and the vein segmentation, as well. This work was supported by the University of Medicine, Pharmacy, Science and Technology "George Emil Palade" of Târgu Mureş Research Grant number 292/4/14.01.2020

Keywords: vein segmentation, deep learning, traditional image processing techniques

SOCIAL SCIENCES

HUNTING TOURISM – LEISURE, SUSTAINABLE OR TROPHY ACTIVITY? A COMPARATIVE MOTIVATIONAL STUDY: SPAIN AND ROMANIA

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Background: The growth of international tourists is both quantitative and spatial, has been accompanied by market segmentation performed according to the motivations. Among these segments there is hunting tourism, which has showed significant growth in last years due to the interest that hunting trophies have aroused. This growth is associated with the mobility of a significant percentage of hunters in Europe, with the existence of a wide variety of game species in the world distributed irregularly over the territory and the development of a network of companies which participate in the commercialization of the game. The aim of the research is to evaluate the opinions and the main motivations of the hunters from Spain and Romania regarding the trophy and hunting activity at national and international level. **Material and methods:** For data collections we used an online questionnaire in Romania and Spain to measure the perception and motivations of the cinegetic reality respectively the values of hunting, position of the society before it, positive and negative aspects and where travel for hunt and trophy hunting. **Results:** The results indicate that the values that the hunters stand out are the humans (friendship, companionship, ethics), the ecological (love of nature, associated with hunting as a tool for understand and enjoy the natural environment), and social (resources generated, hobby, effort). A majority of those interviewed consider that society has a negative view about hunting. **Conclusions:** As a future panorama, the commercial component and the traditional hunting, but the traditional hunting would have irremediably that to adapt to the present times if it tries to subsist. Self-criticism carried out by the hunters themselves, invites us to think that the existence of future meeting points, not exempt from debate, with anti-hunting collectives, being the appreciation of nature and the interest in maintaining it, the basis of the future of hunting

Keywords: hunting tourism, trophy tourism, motivations, sustainable, comparative quantitative analysis

ABOUT RENEWABLE ENERGY POLICY IN THE EUROPEAN UNION

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Background: The European Union energy policy is focused on a set of complex measures aimed at achieving an integrated energy market, as well as ensuring security of energy supply and the sustainability of the energy sector. The main goals of European Union energy policy are: to ensure the functioning of the internal energy market and the interconnection of energy networks; ensuring security of energy supply at Member State level and to promote energy efficiency and energy conservation; economy decarbonising in line with the Paris Agreement related to the climate change; promoting the development of new types of renewable energy in order to achieve climate change goals as well as promoting research, innovation and competitiveness. The European Union policy agenda in this field is determined by the integrated and comprehensive climate and energy policy adopted by the European Council during 2014 and revised during 2018, which aims to reduce greenhouse gas emissions by 2030, increase the share of renewable energies in energy consumption, improve energy efficiency and interconnect a considerable percentage of EU electricity systems. Taking into consideration the consequences of climate change, the development of renewable energy sources is one of the main goals of the European Union's energy policy. At the European Community level, the perception is that the use of more renewable sources to meet energy needs, will significantly reduce dependence on imported renewable sources and will make energy production more sustainable. We will analyze in this paper, the purpose of the Renewable Energy Directive which represents a very important document in this area which establishes an overall policy for the production and promotion of energy from renewable sources. We emphasize that, this particularly important document was revised at the end of 2016, motivated by the promotion of the use of energy from renewable sources in the current context of global warming. Thus, the European Union strengthens its position as a global leader in the field of renewable energy and, at the same time, ensures that the goal of using renewable energy in the European

space will be achieved by 2030. Of course, addressing the issue of renewable energy at European level, we will set out the national renewable energy targets specified by the new European directive (called RED II) for each Member State, taking into account the potential of renewable resources. Of course, European Member States will set out how they intend to meet their targets and their renewable energy policy in their national renewable energy action plans. At the same time, we will present the forms of cooperation that this document promotes between European member states, in order to meet the objectives of renewable energy for the next decade, and we will try to analyze how the RED II, keep the sustainability criteria for renewable sources.

Keywords: renewable energy, sustainability, energy conservation, energy policy, climate change

EFFECTS OF INCOMPATIBILITY UPON CANDIDACY FOR AN ELECTED PUBLIC OFFICE

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Background: The issue of incompatibility in exercising a public office is certainly not new in the Romanian legislation or practice. Incompatibility refers to certain situations when a public official holds more than one position, when this is strictly forbidden by the law. If this situation occurs, however, the legislation provides for a type of correction, stating that the office of that particular public official will end, through the effect of the law itself, before reaching its natural terms of office. Further more, the law provides a three year period of time inside which that person cannot exercise the same public office. Can that person candidate, however, for that office? Can we distinguish properly between the right to run for a public office and the right to exercise a public office? Are these two one and the same? We try to find in our paper the legal answers for these questions. The study uses the logical method and analyzes the legal provisions from the national legislation in force and recent judgements given by national courts in this matter.

Keywords: 176, 176, incompatibility, public office, terms of office

THE NECESSITY OF PLANT HEALTH IN THE GLOBAL CONTEXT OF ENVIRONMENTAL HEALTH AND HUMAN LIFE

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Background: The protection of human, animals and plants health is one of the key objectives of the European Union Treaties. The current EU plant health rules, although they aimed at protecting European agriculture and forestry by preventing the penetration and spread of harmful organisms, have been frequently criticized for failing to provide adequate and effective solutions to this. Of course, this was largely a consequence of the globalization of trade, but especially a negative consequence of climate change and greenhouse phenomena. The updating of these rules was necessary, on the one hand, in order to fully address such increased risks and on the other hand, to introduce unitary and effective rules in all the Member States of the European Community. The new Regulation on protective measures against organisms harmful to plants, replaces the Council Directive, 2000/29/EC, of plant health regime, and thus establishes a stronger, more transparent and sustainable framework for plant health protection in the EU. This document, which entered into force in December 2016, establishes a new regime that will apply from December 2019, after a transitional period of three years, during which the necessary tertiary legislation will have to be adopted and the Member States will be obliged to prepare their administrations for the full implementation of the new provisions. In this paper we will present and analyze the main provisions of Regulation 2016/2031 of the European Parliament and Council of the European Union on protective measures against pests of plants. We will outline the current plants health rules, which we consider to be of a complex, modern and simplified nature, and which will allow for a more risk-based approach. This will result in facilitating the eradication of plant diseases and pests, thus contributing to increasing food security in the Community area.

Keywords: plants health rules, human life health, sustainability, environmental regulation

THE EUROPEAN ARREST WARRANT

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Background: Romania's European integration process required a revision of the legal framework on international cooperation in the legal field in order to harmonize the related domestic legislation with the Community legislation. In this context, the improvement of the legal framework governing international judicial cooperation in criminal matters has been an important component of Romania's negotiations for accession to the European Union given the objective of creating a joint area of justice and security. At the same time, given that transnational organized crime has become increasingly widespread with the opening of European borders, judicial cooperation in criminal matters is, together with information cooperation between law enforcement authorities of Member States, the only effective means available to European countries to counteract this phenomenon.

Keywords: European Arrest Warrant, Romania, international cooperation, judicial cooperation, law

CONSIDERATIONS REGARDING THE OBLIGATION TO CARRY OUT A PSYCHOLOGICAL ASSESSMENT IN CASES RELATING TO MINORS

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Background: In cases relating to measures concerning minors, it is mandatory to hear them if they are 10 years of age or older and to carry out a psychosocial inquiry at the parents' home. The conduct of the psychosocial inquiry shall also be compulsory if the divorce is decided by the notary public by the parties. A psychological assessment of the child and the parents is not mandatory, and it is up to the judge of the case. The study uses the logical, historical and experimental method, analyzes the legal provisions currently in force, as well as the point of view of the doctrine and the solutions derived from the judicial practice. The conclusions are in the direction of expressing concrete proposals to amend the current regulations. The paper aims to consider whether it is appropriate to legally regulate the obligation to carry out a psychological assessment in cases relating to minors under the assumption that measures are taken to determine the minor's home or to establish a visiting program. The conclusions of this study are in the sense of formulating a proposal for a safeguard law to make it compulsory to carry out a psychological assessment of the child and parents in cases concerning measures relating to minors.

Keywords: minor, psychological assessment,, measures concerni

INTERPRETAREA ACTULUI ADMINISTRATIV

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Background: The need to interpret the administrative act arises in relation to any manifestation of the will of the public authority, when a subject, other than the authority of that manifestation wishes to reconstruct its content, as it happens in the context in which the subject called to apply the law is different then the one which emits it. According to some authors, the will of the public authority is an essential element of the administrative decision, because the principle, according to which no administrative act can be attributed to a public authority, unless it was knowingly issued by it also applies in public law. In the case of the administrative act, the expression of will does not emanate from a physical subject, but is usually the result of a succession of acts of different functions or organs; moreover, they do not decide independently, but conditioned by institutional goals, to which the entire activity of the public administration must always be directed.

Keywords: interpretation, administrative act, institution

MEDICAL MALPRACTICE. THE OBLIGATION OF THE DOCTOR'S SAFETY TOWARDS HIS PATIENT

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Background: The analysis of the responsibility for the breach of the security obligation under the conditions of the contemporary society shows that the traditional patterns of civil, contractual or criminal liability, subjective or objective, have been exceeded, asserting themselves as a special responsibility, oriented towards defending the victims. The jurisprudence has creatively contributed to the recognition of an autonomous civil obligation, which can provide specific legal protection to the victims of the unlawful acts. The present study presents the specific elements of the security obligation in the field of medical malpractice, having as reference the sphere, the legal nature and the basis of this liability hypothesis. In the medical field, the injury of the bodily integrity or the death of the patient if they are due to causes other than the illness they suffer are considered to be breaches of the security obligation that the doctor has towards his patient, for whom he must answer by paying compensation for the coverage. damage.

Keywords: civil liability, civil security obligation, medical malpractice

INTERNET ACCESS – FUNDAMENTAL RIGHT

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Background: The health crisis that mankind is going through brings up a theme about which, initially, the arguments and counter-arguments were only theoretical. In the current context, rights such as: the right to work, the right to education can no longer be exercised outside of access to the internet. This is why an adaptation of the system of rights and freedoms in relation to the challenges of the current crisis may represent, on the one hand, a repositioning of the individual in relation to the State and, on the other hand, a repositioning of one state in relation to other states. The theme 'Access to the internet - fundamental right' envisages a comparative approach of the way in which the States of the European Union intend to look, through the legal mechanisms by which such a right is regulated, at the limits of that right and the obligations of the State in ensuring the exercise of such a right. As far as Romania is concerned, such a discussion must start from the need to revise the Constitution and choose one of the ways in which such a right can be regulated and defended: the distinct regulation of the right to internet - a fundamental right or the interpenetration of that right with other fundamental rights and consequently its approach as a means of exercising other fundamental rights.

Keywords: law, constitution, fundamental right, internet, acces

STUDENT RELATIONSHIP MANAGEMENT OPTIMIZATION USING ORGANIZATIONAL PROCESS AUTOMATION TOOLS

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Background: Organizational process optimizations are crucial to meet nowadays challenges, especially in the educational institution environment, where information flow is very intense, and actors involved are different from decision making perspective. The relations with students are one of the most important aspect of educational institutions processes, therefore, the more automated and digitalized is this process, the more attention can be invested to continuous improvement of other organizational processes. Our study intends to promote continuous improvement of student relationship management of universities by active usage of ICT solutions available in organization. In this context, the most challenging aspects are internal regulations and staff training to be ready to use new methods and tools. For successful student relationship management optimization, few steps have to be taken into account: preliminary research: for better understanding of processes that can be changed, digitalized and automized; standardization of existing information's and processes flow regarding: document

management, time management, reporting and auditing process; solution development: develop the solution; test the solution at minimum accessible organizational level to confirm the efficiency to stakeholders; analyze the feedback and make changes needed; extend the solution to whole organization.

Keywords: process optimization, Student relationship management, Business Process Management

A CASE STUDY ON THE CULTURE OF HELPING

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Background: The disabled people are often referred as the one who should be helped, the ones who have to learn from the rest of population. However, this case study argues that the reciprocal is also valid. The value of unselfish helping is very precious to the disabled people and can be learned by them to the extent that it becomes a strong culture in their communities. When a group of such people creates an NGO with the goal of helping the others in the same situation, the culture of helping can create incredible results, that can give a valuable and inspirational lesson about intrinsic motivation, strong shared values, autodidactic learning, communication and synergy etc.

Keywords: culture of helping, intrinsic motivation, shared values, autodidactic learning, synergy

COVID-19 RELATED DISCLOSURES IN THE STATUTORY AUDIT REPORTS FOR BVB LISTED COMPANIES

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Background: Investors stay alert to any signs that may indicate financial distress for listed companies, especially under COVID-19 pandemic conditions, when going concern seems to raise significant uncertainties. Statutory audit reports are designed to deliver reasonable assurance for investors that financial statements are free of material misstatements, including those caused by any biased assumptions that management may rely upon when judging the entity capability to operate as a going concern. **Material and methods:** A sample of 17 listed companies selected in BET index and top five companies listed on AeRO MTF (based on capitalizations and liquidity) will be subject to our research. The main analysis will be conducted in conjunction with the statutory audit reports included in their 2019 annual reports. The main research objective is to observe and analyze special paragraphs included to address key audit matters and subsequent events, in relation with disclosures required by COVID-19 pandemic circumstances. **Results:** Results are expected to confirm adjustments brought to statutory audit reports, in conjunction with COVID-19 disclosures in the issuers' annual reports. Nevertheless, a higher compliance rate is expected to be found for entities listed on the regulated market (BET index), in comparison with AeRO traded entities. **Conclusions:** Relevant conclusions will be based on the results obtained after performing the research activity.

Keywords: statutory audit report, listed entities, subsequent events, COVID-19 related disclosures, going concern

**CONFERENCE OF PHD STUDENTS AND YOUNG DOCTORS.
MEDICINE AND PHARMACY**

CARDIOLOGY

ECHOCARDIOGRAPHIC PREDICTORS OF SUPRAVENTRICULAR ARRHYTHMIAS IN PATIENTS WITH PULMONARY HYPERTENSION

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Background: This study identifies the major supraventricular arrhythmias in a group of patients with pulmonary hypertension and assesses the accuracy of echocardiography in predicting supraventricular arrhythmias. **Material and methods:** Retrospective observational study, conducted in a single medical center for diagnosis and specific treatment of Pulmonary Hypertension, which includes 24 patients followed between September 2015 and August 2018. Supraventricular tachyarrhythmias were diagnosed on a 12-lead electrocardiogram and/or Holter monitoring for 24 hours. Univariate and multivariate logistic regression analyses were performed. **Results:** We included 24 patients aged 45.17±18.77 years (58.33% women), of whom 11 patients had supraventricular rhythm disorders. The most common arrhythmia was atrial fibrillation in 63.63% of cases. Multivariate analyzes showed that a shorter tricuspid annular plane systolic excursion (15.85±1.339mm vs 20.28±1.465mm, p=0.038, 95% CI), a larger area of the right atrium (34.68±5.537cm²/m² vs. 22.34±1.539 cm²/m², p=0.031, 95%CI), a larger area of the left atrium (24.8±1.954cm²/m² vs. 19.12±0.969 cm²/m², p=0.010, 95%CI) and a higher right atrial pressure (9.55±1.423 vs. 8.46±0.874mmHg) were significantly associated with the occurrence of supraventricular tachyarrhythmias. **Results:** We included 24 patients aged 45.17±18.77 years (58.33% women), of whom 11 patients had supraventricular rhythm disorders. The most common arrhythmia was atrial fibrillation in 63.63% of cases. Multivariate analyzes showed that a shorter tricuspid annular plane systolic excursion (15.85±1.339mm vs 20.28±1.465mm, p=0.038, 95% CI), a larger area of the right atrium (34.68±5.537cm²/m² vs. 22.34±1.539 cm²/m², p=0.031, 95%CI), a larger area of the left atrium (24.8±1.954cm²/m² vs. 19.12±0.969 cm²/m², p=0.010, 95%CI) and a higher right atrial pressure (9.55±1.423 vs. 8.46±0.874mmHg) were significantly associated with the occurrence of supraventricular tachyarrhythmias. **Conclusions:** This study presents the role of echocardiography as a predictor of supraventricular rhythm disorders in patients with pulmonary hypertension, helping to select the patient who may benefit from early antiarrhythmic therapy.

Keywords: ecocardiography, pulmonary hypertension, arrhythmia

PROGNOSTIC VALUE OF B-LINES IN AORTIC STENOSIS

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Background: Introduction:Aortic stenosis (AS) is a progressive valvular disease with a markedly poor prognosis. Structural and functional abnormalities caused by AS is an unfavorable prognostic factor for cardiovascular endpoints. Pulmonary congestion is one of the most significant symptoms of heart failure, which can be detected in a simple, non-invasive way, by lung ultrasonography with the determination of B-lines.Objective:Assessment of pulmonary congestion grade and the prognostic value of B-lines in aortic stenosis. **Material and methods:** We enrolled 84 patients (43F, mean age 74±9) with moderate and severe AS. Exclusion criteria were: moderate to severe aortic regurgitation, moderate or severe mitral regurgitation, interstitial lung disease and cardiomyopathy. All patients underwent comprehensive echocardiographic examination and lung ultrasound assessment of B-lines on the antero-lateral and posterior thoracic wall, followed by a follow-up period to evaluate the endpoints. **Results:** A significant increase in the number of B-lines was found in 31% of the patients. The number of B-lines did not correlate with the severity of AS, but showed a significant correlation with the estimated pulmonary pressure (p<0,005, r 0,52) and the functional status of the patients (p<0,001). In patients who presented >30 B-lines at the enrollment, significantly more endpoints were observed at the follow-up (p<0,001, Log rank: 10,7). An endpoint was the death, aortic valve replacement (in case of moderate to severe aortic

stenosis progression), as well as due to acute and chronic heart failure hospitalization. **Conclusions:** Evaluation of B-lines is a simple, radiation-free, and cost-effective examination method for assessing the pulmonary congestion. The number of B-lines correlates with the hemodynamic abnormalities caused by aortic stenosis and the patient's functional status. The increased number of B-lines is an unfavorable prognostic factor for cardiovascular endpoints.

Keywords: Aortic stenosis, Lung ultrasound, B-lines, Pulmonary congestion

THE STUDY OF IMMUNOTHROMBOSIS BY IDENTIFYING NETS IN PATIENTS WITH VENOUS THROMBOEMBOLIC EVENTS – STUDY DESIGN

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Background: The term "immunothrombosis" refers to the role of immune cells in forming intravascular thrombi. Neutrophils play a specific role, by releasing chromatin, nuclear proteins and serine proteases in the extracellular space, forming the so-called "neutrophil extracellular traps" (NETs) that constitute a net-like structure, during the process of NETosis. NETs have been identified in atherosclerotic, atherothrombotic and venous thrombotic lesions, also in autoimmune diseases, and in relation to infectious pathogens. NETosis has been investigated especially in murine animal models, which have shown inhibition of NETs by aspirin, clopidogrel and heparin, but their similar impact on thromboembolic events in human subjects has yet to be extensively determined. **Material and methods:** Prospective, case-control study, which is held at Mureș County Clinical Hospital, Internal Medicine Department, after obtaining patients' informed consent. Required inclusion criteria for the study-group are the confirmation of venous thrombotic event by clinical presentation and imaging techniques, while for the control-group, the diagnosis of peripheral venous disease. Exclusion criteria consist of chronic use of antiplatelet drugs, infectious status, and exacerbation of known autoimmune disease. Each patient benefits of lab tests (full blood count, inflammatory markers, coagulation parameters), NETs quantification, peripheral venous Doppler ultrasound, and, if necessary, computed tomography pulmonary angiogram. NETs quantification is accomplished by enzyme-linked immunosorbent assay (ELISA) technique, using neutrophil elastase determination kits. For the study group, anticoagulation during hospital stay implies low-molecular-weight heparin (LMWH), followed by LMWH or a novel oral anticoagulant (NOAC) at hospital discharge. **Results:** Expected results are the quantification of NETs and its' correlation to the clinical and paraclinical (including imaging) data, determined in evolution, at starting point and after a month of anticoagulation. **Conclusions:** Immunothrombosis and NETs formation are some relatively new concepts, whose clinical implications in the follow up of patients with thromboembolic events are yet to be determined.

Keywords: immunothrombosis, thromboembolism, NETs

CARDIOVASCULAR SURGERY

EBSTEIN DISEASE IN THE ADULT, A RARE FINDING– CASE REPORT

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Background: Ebstein disease represents apical displacement of the tricuspid valve which produces an atrialization of right ventricle, resulting in functional hypoplasia of the right ventricle and tricuspid regurgitation. This defect consists of less than 1% of all congenital heart disease. **Material and methods:** We present the case of a 52-year-old patient, without remarkable long-term medical history and no family history of congenital heart disease or other cardiac pathology, presented with a 4-weeks history of palpitation associated with dyspnea, which was admitted in our Institute for further investigations. Clinical examination reveals a soft regurgitation systolic murmur of tricuspid regurgitation (best heard at the left sternal border with inspiratory accentuation) and fixed split second heart sound with a normal pulmonary component. **Results:** Transthoracic echocardiography reveals malpositioning of septal and posterior tricuspid leaflets with increased anterior leaflet area resulting in a severe right atrial enlargement with reduced right ventricular cavity, severe tricuspid insufficiency associated due to morphologic abnormalities of the valve. Holter ECG tracing reveals sinus rhythm with paroxysmic supraventricular arrhythmia, right atrial enlargement and a right bundle branch block. Due to clinical presentation and paraclinical findings surgical intervention was decided with bioprosthetic tricuspid valve replacement due to intractable morphologic malformations. **Conclusions:** Ebstein's anomaly is an infrequent congenital pathology that in very rare cases remains undiscovered into late adulthood. Most of the times this pathology is diagnosed after an arrhythmic episode.

Keywords: Ebstein disease, paroxysmic supraventricular arrhythmia, tricuspid valve replacement

DENTAL MEDICINE

PATIENT'S APPETENCE TO THE RELATIONSHIP TYPE MODEL DOCTOR-TRAINER

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Background: The root word for the word doctor is derived from the latin "docere" - "to teach". The doctor contributes to the education of patients, regarding a series of diseases; in essence, he has the role of a teacher. The paradigm of the doctor-trainer improves the patient's status. **Objectives:** We evaluate the appetite of the doctor-trainer-patient relationship. Secondly, we evaluate the patient's acceptance of the treatment with / without monitoring the condition, the degree of reasonableness in accepting the therapeutic behavior and the way in which the individual feels the change of his status in the patient. **Material and methods:** Retrospective study on patients who attended CMI Dr.Josan Lucian (January 1 - October 31, 2020). Study conducted on 217 subjects (125 females and 92 males) 6 age categories (15-19, 20-29, 30-39, 40-49, 50-59, 60+ years). The questionnaire has 18 questions, structured in order to confirm / not the objectives. The associated questions highlight patients loyal to the chosen options and patients who change the option. **Results:** Female subjects confirmed a greater interest in completing the study questionnaires (the difference being almost 10%). The model-type relationship of the training doctor is appreciated and understood in percentages that exceed the average in the case of each sex, being between 43.75% and 74.44%. The level of acceptance of the model-type relationship was the maximum in the age category 40-49 years female (74.44%) and 20-29 years male (71.87%). **Conclusions:** The high percentage awarded to the interaction according to the model of the training doctor determines us to consider that this model will also be imposed in the Romanian relational, interactive environment.

Keywords: doctor-patient relationship, therapeutic education, trainer, therapeutic conduct, dentist-patient interaction

THE OPENING OF INTERPROXIMAL CONTACT POINTS FOLLOWING THE LOSS OF FIRST PERMANENT MOLARS AMONG CHILDREN AND ADOLESCENTS

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Background: First permanent molars (FPM) have a major role in maintaining a balanced occlusion, normal masticatory function and dentofacial harmony. FPM loss due to dental caries negatively affects both arches and has adverse effects on occlusion. The aim of the present study is to evaluate occlusal changes and masticatory force following the loss of FPM, emphasizing Andrews' fifth key, which requires tight interdental contact points, with no space. **Material and methods:** In this transversal study 422 individuals were examined in three educational establishments, 220 girls and 202 boys, with an average age of 13 (8-18). During the clinical examination the occlusion was evaluated according Andrews six keys of occlusion. The interproximal relationships were tested by using waxed dental floss. The occlusal masticatory force was measured using the T-Scan in cases with opened contact points. For the statistical data analysis, was used the GraphPad InStat program. **Results:** We found statistically significant association (O.R. = 1.91, 95% C.I. = 1.01 - 3.61) between the post extractional space and the mandibular midline shift due to teeth migration. When contact points are opened, there is a 1.42 times higher risks of unbalanced molar relationship (p=0.016) and 2.7 times greater risks of neighboring teeth tipping (p=0.021). T-Scan measurements revealed a significant decrease of the masticatory force in the edentulous. **Conclusions:** Our results show that the early extraction of the FPM significantly influences occlusal stability by the opening of interdental contact points.

Keywords: first permanent molar, contact points, early extraction

ACCELERATION OF ORTHODONTIC TOOTH MOVEMENT BY ALVEOLAR CORTICOTOMY – AN EXPERIMENTAL STUDY

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Background: Decreasing the amount of treatment time is a challenge in modern orthodontics. One of the methods claimed to work that way is the corticotomy. Although this technique is described in literature, it is not fully understood yet. In this experimental study the effects of corticotomy on orthodontic tooth movement and the modifications of the bone structure were investigated on animal models. **Material and methods:** After the second premolars extraction and an orthodontic appliance was in place, corticotomies were performed on the buccal and lingual side of the bone of the right third premolar. The orthodontic appliance moved the teeth mesially after a continuous force was applied to the system. **Results:** In the literature, similar studies showed an increased tooth movement after the surgical procedure of corticotomy, especially in the first few weeks after the activation of the orthodontic appliance. **Conclusions:** The conclusions of our study are expected to be similar with other findings showing that corticotomy can increase the amount of tooth movement and shortening orthodontic treatment time. This could be due all the reactions and changes that take place in the bone cells in the area where the corticotomy is performed.

Keywords: orthodontics, corticotomy, surgery, accelerated tooth movement, osteoblasts

SURGICAL MANAGEMENT OF COMPLICATED LUDWIG'S ANGINA IN A PATIENT WITH POORLY CONTROLLED DIABETES MELLITUS TYPE II

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Background: Diabetes mellitus type II is one of the most frequent chronic metabolic diseases. Due to the impairment of insulin secretion and the decreased insulin action, which usually coexist in one patient, different organs suffer long-term damage, contributing to multiple organ failure. Chronic hyperglycemia determines neurological and vascular complications and an increased susceptibility to infections. Furthermore, because of the exacerbated immunoinflammatory response to oral pathogens, severe destruction of the periodontal tissue occurs. As a consequence of this perturbation, oral lesions including dental decay have a rapid and mostly severe evolution. **Material and methods:** We present the case of a 45-year-old patient admitted to the Targu Mures Emergency Hospital with acute hyperglycemia with ketoacidosis, chronic pancreatitis, chronic alcohol consumption on 20th October 2020. Shortly after admission patient develops an odontogenic abscess, which is first drained orally and the patient receives long spectrum antibiotics. Evolution is unfavorable, the purulent collection affects the sublingual, submandibular spaces bilateral, the submental space which is again drained extraoral and after another 2 days, the infection involves the pharyngomaxillary, retropharyngeal, parapharyngeal spaces, but also the left superficial neck spaces and the anterior mediastinum. The patient's general condition becomes septic, developing pneumonia, with high fever, tachycardia, and laboratory results show anemia, hypoproteinemia, hypoalbuminemia, elevated c-reactive protein, leukocytosis. Oro-tracheal intubation is necessary. Several incisions are performed, draining all the implicated spaces. Specific antibiotics are administered. After the purulent secretion is remitted wide necrectomy is needed to eliminate the necrotized tissues. Wounds are sutured after the complete purulent drainage. **Results:** After surgical drainage, extensive necrectomy, and daily antiseptic wound dressing, local evolution is satisfying, however, the patient remains intubated due to the general decompensation. **Conclusions:** Dental abscess evolves rapidly and extensively in the case of immunocompromised patients, that is why a prompt and complex surgical and general treatment is mandatory.

Keywords: dental abscess, oral, infection, drainage, diabetes

STATISTICAL STUDY CONCERNING THE ORTHODONTISTS' PERCEPTION OF THE CONVENTIONAL AND SELF-LIGATING BRACKET SYSTEMS

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Background: The evidence-based medicine pyramid displays the practitioner's experience and personal opinions on the orthodontic techniques at its basis. This is important precisely because it represents the starting point of what later will become "scientific proof". The aim of this study was to assess the personal clinical experience of the orthodontic specialists from the national and international community in using the two bracket systems: conventional and self-ligating under certain aspects.

Material and methods: A 'de novo' questionnaire has been developed by means of Google Forms. It comprised 23 questions as follows: one single choice question regarding the preference for one of the two systems, 20 questions which assessed various proprieties and aspects of the bracket systems by means of a 1 to 5 scale and 2 descriptive questions regarding the type of system used. The Cronbach's Alpha coefficient, Shapiro-Wilk and Mann Whitney tests, descriptive and inferential statistics were applied using GraphPad Prism, $p=0,05$. **Results:** 130 answers were recorded. 83% of the respondents use or have used both systems. Significant statistical differences have been identified for the following parameters: bracketing technique, patient confort, oral hygiene, activation time, tooth movement, global treatment time, final results and costs. **Conclusions:** Self-ligating brackets are generally preferred by clinicians in the dental office as they seem to be more accesible concerning their proprieties

Keywords: self-ligating, conventional, physical chemical proprieties

BRUXISM: STATE OF ART

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Background: Bruxism is an increasingly common parafunction among adolescents. This pathological-habit, represented by the grinding and clenching of the teeth, takes two forms from a pathophysiological point of view, depending on the circadian moment of its manifestation: nocturnal and diurnal bruxism. The objective of this review is an "up-date" of data from the literature on the latest methods used in the diagnosis and monitoring of adolescents with bruxism, as well as the assessment of the success rate of various therapeutic methods applied. **Material and methods:** To realise this review, were collected the data and information provided by multiple clinical studies published in the last 10 years in the literature. The including-criterias of these published studies on bruxism was mainly the study of groups of children and adolescents. These studies analyzed the method of diagnosis, monitoring of subjects and the effectiveness of the applied therapeutic effect. The data collected from the studied were statistically processed and was used for defining the conclusions. **Results:** In the last decade, more than 400 studies have been published in the literature on bruxism, its manifestations and implications in current dentistry. Of these, only 28 related to the diagnosis, clinical manifestations and treatment of bruxism in children and adolescents (7% of all published studies). The prevalence of bruxism is between 3.5-40.6% in children and 31.6% in students. In students, bruxism is directly correlated with self-reported muscle-pain and increased by experienced or anticipated stress. Children from primary and secondary-school before an exam have a prevalence of bruxism similar to that finded in students. **Conclusions:** From all the parafunctions of the dento-maxillary area, bruxism is probably the most harmful. Bruxism has an uncertain, multifactorial etiology and is a current problem in research. Bruxism in young people and adolescents, diagnosed early and treated correctly, can be the "antidote" to dental, periodontal and musculoskeletal lesions of the adult temporo-mandibular.

Keywords: bruxism, adolescents, children, harmful, update

ORTHODONTIC MATERIALS' SHORT- AND LONG-TERM PERFORMANCE ON BRACKET FAILURE: A META-ANALYSIS

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Background: Failure of brackets increases the treatment time of orthodontic therapy and burdens the patient with unnecessary costs. The rebonding procedures may increase the risk of possible redundant damage of enamel. Our objective was to compare the bond failures of different orthodontic materials based on the results of available randomized clinical trials. The meta-analysis has been registered in Prospero with CRD42020163362 ID number. **Material and methods:** Systematic search of articles was performed in Cochrane, Embase and Pubmed databases. Participants without direct and indirect restorations on teeth's buccal surfaces, congenital enamel defects or caries, met the inclusion criteria of study selection. **Results:** After the manual control of 5 652 articles, 25 publications were included into the quantitative synthesis. The results of meta-analysis revealed no difference in risk of bracket failures in term of 6 months period between self-etch primer (SEP) and conventional acid-etch primer (CM-AEP) methods (RR: 1.19, CI 95%). After 12 months the risk of bond failure is 73% higher in case of brackets bonded with SEP than with CM-AEP (RR: 1.73, CI 95%). There is a 57% lower risk of brackets failure if the bonding technique involves self-cured resin (SCR) against resin modified glass ionomer cement (RMGIC) (RR: 0.43; 95% CI: 0.29-0.64). The failure decreases with 48% after 18 months in case of SCR technique against RMGIC (RR: 0.52; 95% CI: 0.44-0.62). **Conclusions:** The results of meta-analysis reveal a potential better long-term (> 12 months) performance of conventional acid-etch primer technique in comparison with self-etch primer method and recommend the alternatives of glass ionomer or resin modified glass ionomer for bracket bonding. Present study concludes that the quality of available orthodontic randomized clinical trials varies and there is a need of high quality randomized clinical trials with large sample size in the field of orthodontics.

Keywords: bracket failure, self-etch primer, acid-etch primer, self-cured resin, glass ionomer

EFFECT OF ADJUSTING THE SNA AND SNB ANGLES IN PATIENTS WITH INCREASED FRANKFURT HORIZONTAL - ANTERIOR CRANIAL BASE ANGLE ON DIAGNOSIS AND TREATMENT OF THE JAWS ANOMALIES

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Background: The skeletal maxillo-mandibular anomalies were often associated with modified angle between Frankfurt horizontal (FH) plane and anterior cranial base (SN). An increased (FH. SN) angle was correlated to decreased SNA and SNB angles, which therefore necessitate compensation in order to obtain the right diagnosis. Different approaches for SNA, SNB adjustments including geometrical models and correlation tables were suggested. We aimed to assess the impact of the SNA, SNB adjustments using a geometrical model with a halfway FH and SN reference plane on the final postoperative results, in patients with skeletal deformities of the jaws. **Material and methods:** Patients referred to our oral and maxillo-facial department for orthognathic surgery between 2011 and 2020, with or without adjustments of the SNA, SNB angles, were retrospectively evaluated. When indicated (increased inclination of FH to SN), the compensation method consisted in increasing the SNA, SNB angles with half the difference between the actual and medium (FO, SN) angles. Impact of the compensation on final diagnosis and treatment was statistically analyzed. **Results:** 70% of patients showed modified (FH, SN) angle and needed SNA, SNB compensation. In 57% of them and 40% of the whole group the compensation definitely changed the diagnosis of the anomaly and such the orthognathic treatment (P=0.015 and p=0.019 respectively). Exceptions for the normal range of SNA, SNB angles (cleft lip sequelae, hypostaturism) were also encountered. **Conclusions:** The compensation method for SNA, SNB angles using a halfway SN, FH reference plane is a useful tool for proper functional and esthetic results in orthognathic surgery.

Keywords: SNA, SNB, adjustment, Frankfurt horizontal, cranial base

GENETICS

UTILITY OF LIGATION-DEPENDENT REVERSE TRANSCRIPTION POLYMERASE CHAIN REACTION TECHNIQUE FOR ACUTE MYELOID LEUKEMIA PATIENTS

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Background: Ligation-dependent reverse transcription polymerase chain reaction technique (LD-RT PCR) represents one of the techniques that can be used in order to detect fusion genes. Currently, for several fusion genes described on acute myeloid leukemia (AML) patients exist target treatment. Also, the identification of them are important for disease classification and prognostic prediction. The aim of our study was to evaluate the utility of LD-RT PCR technique on AML patients. **Material and methods:** The study was approved by the ethical committee of our university and by the ethical committee of Mures County Emergency Clinical Hospital. Thirty-four patients were included in the study. The total RNA was isolated from white blood cells. The RNA was revers-transcribed to cDNA. The cDNA was used for LD-RT PCR technique. Finally, the capillary sequencing technology was used to identify the amplified sequence of the cDNA. **Results:** A number of nine probes were unable to be interpreted due to their low quantity of RNA. High quantities (minimum 220 µg/µl) of total RNA are required for the LD-RT PCR technique used by our team. From twenty five probes that were successfully interpreted, five were with fusion genes. Fusion genes like PML-RARA, ARHGEF12-MAPRE1, NUP98-NSD1 genes, etc. **Conclusions:** LD-RT PCR technique is able to classify AML patients, to predict the patient prognostic and to identify fusion genes where target therapy is required such as PML-RARA fusion genes. The cost of LD-RT PCR technique are low compared to their utility, but the LD-RT PCR technique required a high quantity of total RNA.

Keywords: fusion gene, AML, LD-RT PCR, PML-RARA, NUP98-NSD1

HYGIENE

TOBACCO EDUCATION AMONG PUPILS FROM 9TH CLASS IN CHIȘINĂU

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Background: Tobacco education is an important way to raise a healthier generation of youth and family and school influence the process. Our general aim was to analyze the level of involvement and participation of pupils in any educational program for preventing or stopping smoking among pupils from 9th class in Chișinău. **Material and methods:** The study included 20 schools from Chișinău the sample comprised of 368 pupils in 2015 and 819 in 2018 from grade 9 classes. The survey instrument was an anonymous questionnaire applied earlier in the ASPIRE project that included a set of items regarding tobacco consumption among pupils. **Results:** Schools contribute to youth education through various programs but less than a third of the pupils (28.0% - 2015, 26.6% - 2018) have participated during the last year in any educational program for preventing or stopping smoking in their school or another school. Only 8.2% of the pupils have participated in 2015, and 8.3% in 2018 in smoking prevention programs organized by NGOs or other entities outside their school. About 71.7% of the pupils in 2015 and 74.5% in 2018 did not participate in any educational program. Parental education is very important in tobacco consumption among pupils. During the last 12 months, 35.9% of parents talked sometimes with pupils about the dangers of smoking in both years of study, rarely (20.9% in 2015, 15.1% in 2018, $p \geq 0.05$) and often 24.2% (2015), 23.1% (2018). As many as 13.6% of the parents in 2015 and 19.7% in 2018 have never talked with their kids about the dangers of smoking during the investigated period. **Conclusions:** A large majority of pupils did not participate in educational programs in schools and parents have remained a major pillar in pupil's tobacco education. The results of the study highlight the need to introduce smoking prevention programs in the setting of schools.

Keywords: pupils, tobacco education, school, family

INTERNAL MEDICINE

LIVER INJURY IN COVID-19 PATIENTS WITH PRE-EXISTING LIVER DISEASE – A SUPPORT HOSPITAL EXPERIENCE

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Background: The pandemic of Coronavirus disease 2019 (COVID-19) affected physicians all around the world and still represents a daily struggle. Our main purpose in this study was to assess the impact of abnormal liver function in patients with pre-existing liver disease on the prognosis of COVID-19. **Material and methods:** We performed a retrospective, observational study of 75 patients confirmed with COVID-19, admitted in Mureş County Clinical Hospital, admitted in three different Departments - Gastroenterology, Infectious Diseases and Intensive Care Unit during a 6-month period (March-August 2020). We included patients diagnosed with pre-existing liver disease, who presented at admission or during the first 7 days of hospitalization abnormal liver function tests. **Results:** From a total of 1479 patients admitted in Mureş County Clinical Hospital, 75 patients (5.08 %) diagnosed with pre-existing liver disease, which presented with abnormal LFTs at admission or during the first 7 days of hospitalisation were included in the study. Mean age was 49.54 years (44.54-51.83), with a male: female ratio of 1.27:1. Intensive care unit admission was significantly associated ($p < 0.05$) with parameters such as: length of hospital stay, platelet count, leukocyte count, ALT highest value, GGT, and ferritin value. **Conclusions:** Abnormal liver function tests are common in COVID-19 patients and a significant number of studies have analysed the probable etiologies. Patients with SARS-COV2 liver injury should be followed-up closely, especially with the association of a pre-existing liver disease.

Keywords: COVID-19, liver injury, pre-existing liver disease, SARS-COV2, pandemic outbreak

CLINICAL SIGNIFICANCE OF A CHARLSON COMORBIDITY INDEX, GLASGOW-BLATCHFORD SCORE HYBRID IN UPPER GASTROINTESTINAL BLEEDING OUTCOME AND MORTALITY PREDICTION

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Background: Upper gastro-intestinal bleeding (UGIB) represents a symptom of a gastrointestinal disease of diverse etiology, clinical importance and severity, with a varied incidence up to 145 cases to 100.000 inhabitants per year, influenced by pharmacological and epidemiological factors. Mortality is estimated at around 10%, independent of etiology, diagnosis or treatment protocols. Considering this, we raised the question of evaluating whether merging clinical scores into a single evaluation protocol can be relevant for accurate prediction of outcome, hospital stay and cost of stay. **Material and methods:** We conducted a retrospective, observational study based on UGIB in-patients referred to the Gastroenterology Unit of a tertiary care center, over the course of one year. The study aims to follow the epidemiology of UGIB, Charlson index, Rockall and Glasgow-Blatchford scores and resources, establishing correlations between case severity and comorbidity index and hospital stay, mortality and resource needs. The goal is to develop a complex score for the evaluation and subsequent management of UGIB cases. **Results:** The statistical analysis of collected data enabled us to draw the following conclusions: UGIB cases showed a 20% increase over the previous 5 years. The most frequent causes of UGIB have been peptic ulcers and esophageal varices. Based on the Glasgow-Blatchford and Rockall clinical scores, the cases have been graded, in majority, as high risk of re-bleeding and 3 month mortality risk. We found a positive correlation between the clinical scores and the need for blood transfusions and overall costs. We also found a positive correlation between the Blatchford score and Charlson index and overall mortality. We did not find a correlation between the Rockall score and in-patient mortality. **Conclusions:** UGIB represent an important part of clinical practice that require complete, thorough and fast evaluation with an adequate referral of resources for optimal care.

Keywords: upper GI bleeding, Glasgow-Blatchford score, Charlson index, clinical score, mortality

NEUROLOGY

RESEARCH PROJECT PRESENTATION: THE ROLE OF EXOSOMES IN THE INDIVIDUALIZED MANAGEMENT OF GLIOBLASTOMAS

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Background: The most feared brain tumour is glioblastoma (GBM) due to its heterogeneous histology, substantial invasive capacity and rapid postsurgical recurrence. Even in cases of early management consisting of surgery, chemo- and radiotherapy, the prognosis is poor. The latest focus is on molecular characterisation of the tumour, including analysis of extracellular vesicles (EVs). GBM cells release numerous exosomes whose cargo promotes tumour development and therapeutic resistance. The aim of our prospective observational study is to isolate exosomes from GB patients blood and, subsequently, to portray the exosomal phenotype based on the level of various exosomal oncoproteins, namely AnxA1, EGFR/EGFRvIII, IDH1, PD-L1 and NANGP8, in three key-moments: before surgery, six months after surgery and in case of recurrence. These values will ultimately be compared with those belonging to healthy patients. Our main objective is to identify a correlation between exosomal profile and clinical and radiological characteristics of the patients. Our secondary objective aims to highlight the influence of adjuvant therapies and recurrences on GB-derived exosomal cargo. **Material and methods:** The study will comprise 30 GB patients who meet the inclusion criteria (adults, accepting surgical treatment) and 30 healthy patients sharing similar demographic data. The blood collected in the aforementioned key-moments will be processed in the Immunology Laboratory of CCAMF. Exosomal isolation will be acquired by density gradient ultracentrifugation, while exosomal acquisition will be performed using BD FACSAria III flow-cytometer. Exosomal cargo will be explored by Western blot method. The data will be analysed using appropriate statistical tests. **Results:** Results and conclusions will be made public as soon as the research will be finalized. **Conclusions:** Our study provides a modern multidisciplinary approach towards GB management, whose results would allow a more profound understanding of exosomal importance as diagnostic and prognostic markers and, consequently, a personalized GB treatment depending on tumour aggressiveness.

Keywords: glioblastoma, extracellular vesicles, exosomes

THERAPEUTIC PLASMA EXCHANGE IN PROGRESSIVE MULTIFOCAL LEUKOENCEPHALOPATHY RELATED TO THERAPY WITH NATALIZUMAB

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Background: Progressive multifocal leukoencephalopathy represents a brain demyelinating disease, caused by infection of oligodendrocytes by JC virus (an ubiquitous virus) in immunocompromised patients or patients that receive immunosuppressive medication. Natalizumab, a recombinant humanized monoclonal IgG4 antibody, increases the risk of PML infection by suppressing T-cell mediated immune responses in brain. **Material and methods:** Therapeutic plasma exchange (TPE) was done using Spectra Optia® Apheresis System in the Department of Neurology, Mures County Emergency Clinical Hospital, using a mixture of albumin and frozen fresh plasma as exchange fluid, and anticoagulant citrate dextrose Solution A as anticoagulant of choice. **Results:** We present the case of a 34 years old patient diagnosed with multiple sclerosis since 2014 that was on immunosuppressive treatment with Natalizumab (Tysabri) since 2016 with favorable evolution presenting sudden motor deficit on the right side and speech impairment. The neurological examination revealed liquid dysphagia, horizontal nystagmus to the right side, spastic hemiparesis grade 2/5 MRC in the upper limb, and 4/5 MRC in the lower limb, plantar and patellar clonus, motor aphasia and EDSS score 6 points. The brain MRI showed multiple demyelinating periventricular hyperintense lesions in T2 FLAIR and a left prerolandic lesion with "milky-way" aspect, highly suggestive for PML. We performed a number of 5 TPE sessions, each one replacing between 1 and 1.3 total plasma volumes, with an exchange fluid volume ranging from 2100 to 2400 ml. We followed up paraclinical biomarkers required for prevention of TPE-related complications. In our case, there were no pathological changes. **Conclusions:**

Natalizumab causes selective immune suppression of the central nervous system, increasing the risk of patients undergoing treatment of developing PML. TPE may represent a way to reverse the effects, restoring immune effector function in patients by clearing natalizumab. Taking into consideration the severe consequences and prognosis of PML, TPE is a viable option of treatment for natalizumab-induced PML.

Keywords: progressive multifocal leukoencephalopathy, natalizumab, therapeutic plasma exchange

OBSTETRICS AND GYNECOLOGY

THE INFLUENCE OF ENVIRONMENTAL FACTORS AND LIFESTYLE ON THE OUTCOME OF PREGNANCY AND NEONATE

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Background: Pregnancy, a physiological process, is associated with an excessive oxidative stress for the pregnant woman and fetus. Plenty reports have been published on the pre-, peri- and postnatal circumstances that contribute to the occurrence of maternal pathologies during pregnancy with consequences for the fetus. **Material and methods:** Our study was conducted using a questionnaire among pregnant women admitted to Gynecology I Clinic during November 2019-October 2020, with the approval of the Ethics Committee of ECCH Tg-Mures and UMFST Tg-Mures and written informed consent of participants. We processed the data of 89 pregnant women, divided into 3 groups: control group 60 pregnant women without pre-existing pathology and pregnancy with physiological course (group 1), 21 pregnant women with premature rupture of membranes and premature delivery (group 2), 8 pregnant women with fetal heart disease known before birth (group 3). Endogenous factors (pre-existing diseases) and exogenous environmental factors (smoking), which increase oxidative stress, were followed. Exclusion criteria: pregnant women with preeclampsia/cardiovascular diseases, gestational diabetes, hypothyroidism at admission. **Results:** The average age of the pregnant women enrolled in this study was 26.62 years \pm 6.28 (SD). We noticed in group 2 and 3 versus group 1 a not quite significant difference in the distribution of smokers/non-smokers. Smoking was present more frequently in the group of the mothers of premature babies and those with neonatal cardiac pathology compared to the control group. As expected, there was a significant difference in the Apgar score at 1 minute in the premature group 7,952 \pm 1,835 SD, compared to the control group 9,083 \pm 1,619 SD. There was no statistically significant difference in birth weight corrected at gestational age between these two groups. **Conclusions:** Smoking is an aggravating factor of oxidative stress in pregnancy, it might contribute to difficult postnatal adaptation of the newborns born from smoking mother, and it increases the risk of premature delivery.

Keywords: oxidative stress, smoking, birth weight, Apgar score, newborn

ONCOLOGY AND RADIOTHERAPY

RADIOMICS ANALYSIS IN PREDICTING THE EVOLUTION OF LOCALLY ADVANCED, MULTIMODALLY TREATED, HEAD AND NECK CANCERS

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Background: Radiomics is one of the most challenging areas of translational research, being a subdomain of artificial intelligence (AI), based on computer aid diagnostics (CAD). Radiomics involves the extraction of mineable features from medical images to design prognostic and predictive models. Locally advanced head and neck cancers benefit from non-surgical treatment by chemoradiotherapy but with all the progress of multimodal treatment, the recurrence rate, especially loco-regional, is 50-60% at 2 years. The aim of the study is to propose a standardized algorithm to predict the evolution of locally advanced head and neck cancers using radiomics features extracted from CT imaging from radiotherapy planning simulation. **Material and methods:** Using free software (maZda), CT images of the primary tumor of head and neck cancer were delimited and analyzed. Radiomics features extracted (shape, kurtosis, intensity, entropy) were entered into a database in order to correlate with the response to the final treatment. **Results:** Radiomics can extract features invisible to the examiner's eye that can be used as predictive biomarkers in order to modulate treatment. Analyzing CT images from 5 cases, large variations of radiomic characteristics were observed even if the same image acquisition protocol was used. Compiling a database with a large number of cases and multivariate correlation of these characteristics with the values of "responder" or "non responder" status will be able to identify significant radiomics biomarkers. **Conclusions:** Radiomic imaging analysis in CT simulation is a simple, cost-free, non-invasive method that can be applied in any radiotherapy center to develop predictive models that can modulate the escalation or de-escalation of radiochemotherapy treatment of head and neck cancers.

Keywords: radiomics, head neck cancers, predictor, biomarkers, computer tomography

PATHOLOGY

INCIDENCE OF GLIOBLASTOMAS AT THE PATHOLOGY DEPARTMENT OF THE SCJU TÂRGU MUREŞ

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Background: Glioblastomas are the most frequent cerebral tumors. According to published data most frequent localization is the temporal, parietal and frontal lobes, and the right cerebral hemisphere is most of the cases. Patients are usually aged 55 to 85 years, and most of them die within the first year after diagnosis. Therapy of glioblastoma involves surgical excision of the tumor, radiotherapy and chemotherapy. **Material and methods:** This retrospective study has been carried out at the Pathology Department of SCJU Târgu Mureş. We included 92 cases of glioblastoma in the study, diagnosed between 2014 and 2016. **Results:** Approximately half of the cases (42.39%) have been diagnosed with glioblastoma in 2016. Age of the patients included in the study ranged between 8 and 81, and most of them (73.91%) were over 50 years of age. Gender ratio was 1. Most frequent localization of glioblastomas was the frontal lobe, and less frequently the temporal and parietal lobes. We identified 1-2 cases each with less common localizations, like the thalamus, corpus callosum, intraventricular or the basal nuclei. Glioblastomas were found slightly more frequently in the right cerebral hemisphere (51%). **Conclusions:** In the period between 2014 and 2016 most glioblastoma patients have been diagnosed in 2016. The tumor is diagnosed more frequently in patients over 50 years and there are no gender differences. It develops more frequently in the right cerebral hemisphere and the frontal lobe. *This work was supported by the Collegium Talentum Programme of Hungary*

Keywords: Glioblastoma, Age, Localization

THE CHALLENGING ISSUE OF TUMOR HETEROGENEITY IN GASTRIC CANCER

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Background: Considering the continuously rising prevalence of gastric cancer (GC), this neoplasia represents a real global health problem, especially because of the feature of heterogeneity, which increases in complexity, with the improvement of diagnostic tools. **Material and methods:** Morphologic assessment, followed by immunohistochemical (IHC) analysis for HER2 was done on a number of 65 cases of gastric cancer. Cases with HER2 equivocal result on IHC were further analysed using fluorescence in-situ hybridization (FISH) techniques. The HER2 phenotype of the included tumors was further correlated with the clinico-pathological aspects, such as primary tumor histologic subtype, depth of invasion, presence/absence of lymph node metastases or distant metastases. **Results:** A quarter of gastric tumors demonstrated HER2 overexpression of any degree, but only 65% of the HER2-overexpressing cases were proven amplified on FISH analysis. More than 90% of HER2-positive cases represented well-differentiated tumors. Beside this feature, none of the others, such as depth of invasion within gastric wall, regional lymph node status or presence/absence of metastases at distant sites, were correlated with HER2 status, assessed with either IHC or FISH technique. **Conclusions:** Gastric cancer demonstrate wide variations regarding both the microscopic, morphologic aspects, and the degree of HER2 overexpression/amplification. Moreover, the feature of tumor heterogeneity is observed even within the same tumor, not only between tumors from different patients, reason why, further studies are needed for a better comprehension of this malignancy.

Keywords: gastric cancer, HER2, heterogeneity, IHC, FISH

PEDIATRICS

IMPLANTATION OF COVERED STENT FOR COARCTATION OF THE AORTA ASSOCIATED WITH SEVERE SECONDARY HYPERTENSION IN ADOLESCENT – CASE REPORT

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Background: Coarctation of the aorta represents 5-8% of all congenital heart defects. Most patients with this pathology will have secondary hypertension. Implantation of covered stent have become the election treatment in young adults and adolescents.

Material and methods: We present the case of a 14 year - old male adolescent, without remarkable medical history, with elevated blood pressure at rest discovered on a routine examination 5 months prior his admission in our department. The patient presented to the pediatric Emergency Department for elevated blood pressure (BP) 180/115mmHg, headache, dizziness and anxiety. Clinical examination revealed a left parasternal systolic murmur grade III/6 with interscapular area irradiation, absence of bilateral femoral pulses and a blood pressure gradient between the upper and lower limbs of 40 mmHg. Echocardiographic evaluation revealed a narrowing of the aortic isthmus with a maximum gradient of 85 mmHg and hypertrophic left ventricle. **Results:** Computed tomography angiography revealed a focal decalibration area with a diameter of 0.7cm, extensive collateral circulation and bilateral dilated subclavian arteries. BP Holter monitoring revealed values > 95 percentile. Beta-blocker therapy was initiated. Based on clinical and imaging data, it was decided to perform the interventional treatment. The investigation revealed a peak to peak gradient of 23mmHg at coarctation site. Stenting was performed, using a 4.5cm coated stent, dilated to 20mm, allowing the reduction of the intraprocedural gradient to 2mmHg. After the procedure, the patient presented hypertensive crises, needing associated antihypertensive treatment. Afterward, the patient's evolution was favorable, with no other complications. **Conclusions:** Covered stent implantation currently appears to be an attractive and preferred alternative for the treatment of coarctation of the aorta in adolescents and young adults. This procedure is considered successful when the residual gradient is less than 10 mmHg. Most common complications include vascular complications, restenosis, aortic aneurysm and the need of re-dilatation, due to patient's growth.

Keywords: coarctation of the aorta, covered stent, adolescent

PHARMACOLOGY

METFORMIN IMPROVES HALOPERIDOL-INDUCED THIGMOTACTIC BEHAVIOR IN RATS

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Background: Because their therapeutic efficacy is well known, typical neuroleptics, such as haloperidol, are frequently prescribed to patients. Chronic treatment is associated with extrapyramidal side effects that can also be observed in experimental animals. The previously reported studies showed the presence of a special, thigmotactic behavior after chronic administration of haloperidol to rats. This behavior is associated with fear and anxiety because animals are unable to focus on a given task. Metformin, an oral antidiabetic with proven antioxidant potential, appears to improve neurogenesis, spatial memory, and to ameliorate extrapyramidal motor disorders. **Material and methods:** To evaluate the thigmotactic behavior, 40 white male Wistar rats were randomly divided into four groups: CTR (n=10)-control, METF (n=10)-animals receiving metformin 500 mg/kgbw, HAL (n=10)-animals receiving haloperidol 2mg/kgbw, HALMETF (n=10)-haloperidol 2mg/kgbw and metformin 500 mg/kgbw. The medication was administered at the same time by gastric gavage for 40 days. The animals were housed individually under standard conditions. The Morris Water Maze test was performed in the last week of the experiment. Circular movement around the tank, almost exclusively in the peripheral area, is considered a thigmotactic behavior. **Results:** We analyzed the travel paths and the time in which the rodents exhibited abnormal behavior to observe a possible beneficial effect of metformin in improving the thigmotactic behavior. Chronic administration of metformin attenuated the thigmotactic behavior induced by haloperidol, statistically significant differences ($p < 0.05$) being observed between the groups included in the study. **Conclusions:** Metformin, co-administered with a conventional neuroleptic from the beginning of treatment, may have a protective effect by preventing (or slowing down) the onset of extrapyramidal side effects. **Funding:** This work was supported by the George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mureş, Research Grant number 293/4/14.01.2020.

Keywords: metformin, haloperidol, thigmotaxis, water, maze

PHARMACY

APPLICATION OF SEDEM-ODT METHODOLOGY IN DEVELOPING ORODISPERSIBLE TABLETS WITH CANNABIDIOL

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Background: Cannabidiol (*CBD*) represents one of the most studied alkaloids nowadays. This cannabinoid can be found in the *Cannabis sativa* species and it is used to treat Dravet and Lennox-Gastaut syndromes. The present study aimed to characterize the active pharmaceutical ingredient (API) and excipients (superdisintegrants, diluents, sweeteners and, co-processed excipients) using SeDeM ODT methodology which evaluates 15 parameters coupled in six incidence factors: particle size, compressibility, flowability, lubricity/stability, lubricity/dosage and, disintegration. The Index of Compressibility and Good Dispersibility - *IGCB*, Parametric Index - *IP* and Parameter Profile Index - *IPP* were calculated. **Material and methods:** The evaluated substances were: CBD, spray-dried lactose, cellulose, mannitol, sorbitol, soy polysaccharides, sodium starch glycolate, sodium croscarmellose and, two co-processed excipients: Prosolv EasyTab SP and Prosolv ODT G2. Evaluation of the incidence factors was made by respecting the *USP 32*, *Eph 9* and, *SeDeM tool requirements*. **Results:** The SeDeM diagram showed that CBD compressibility needs to be improved. The only excipients that had the compressibility over 5 (the minimum value needed) were the co-processed excipients. To establish the amount of co-processed excipient needed the PI, IPP and IGCB were calculated. The results showed that in the case of Prosolv-ODT G2 the amount of excipient needed to be added so that the CBD to be compressed is 85.57% while in the case of Prosolv EasyTab SP is 71.72%. **Conclusions:** CBD and excipients studied were characterized using the SeDeM-ODT diagrams. The diagrams and the calculated indexes helped us to establish the amount of excipients needed to be added to obtain good compressibility. The co-processed excipients presented also good disgregability properties. Future studies regarding the compound powders need to be realized to obtain orodispersible tablets with good compressibility and disgregability properties.

Keywords: SeDeM-ODT, CBD, powders, excipients, preformulation studies

MICROENCAPSULATION OF SALVIA OFFICINALIS ESSENTIAL OIL BY COMPLEX COACERVATION TECHNOLOGY

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Background: Bioactive materials of natural origin gain more and more interest in the food-, cosmetic- and pharmaceutical fields as promising alternatives for certain synthetic ingredients due to their more favorable safety profile. Essential oils are particularly important in this regard because they can be used in numerous applications. In order to counteract their high sensitivity to environmental conditions and to enhance processability different encapsulation strategies have been used. The objective of the current study was to encapsulate *Salvia officinalis* essential oil into core-shell type microcapsules by the means of complex coacervation technology. **Material and methods:** *Salvia officinalis* essential oil was obtained by traditional steam distillation from aerial parts of sage plant. Gelatin, Gum arabic, Glycerol and Hydrochloric acid were purchased from Merck. Microcapsules were obtained by complex coacervation technology according to the following major steps: *Salvia officinalis* essential oil was dispersed into aqueous Gelatin solution and added to the formerly prepared aqueous Gum arabic solution under continuous stirring of 800 rpm at approx. 50°C by using Velp type magnetic stirrer. 0.5 N HCl solution was used to adjust the pH of the obtained mixture to approx. 4. After cooling to 10°C in ice bath, the crosslinking agent Glycerol was added in order to harden the formed shell. Separation and purification of microcapsules was performed by decantation and washing with purified water. For the evaluation of microcapsules Bresser LCD-35 type digital microscope and ImageJ software were used. **Results:** According to the optical microscopic investigations, polydisperse core-shell types microcapsules with diameter in the range of 30-80 µm were successfully

obtained. **Conclusions:** Complex coacervation is a proper method to encapsulate *Salvia officinalis* essential oil into Gelatin and Gum arabic based core-shell type systems.

Keywords: microencapsulation, essential oil, complex coacervation, *Salvia officinalis*

THE INTEREST OF THE PHARMACEUTICAL INDUSTRY IN THE STUDY OF HUMAN ERROR

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Background: Pharmaceutical industry is special since it encompasses two crucial fields, namely public health, through the finished products, medicines, and engineering, respectively, through the specific technology necessary for manufacturing, the equipment and associated computers. Thus, the need to pay attention to probable human errors occurring in this high-risk industry is a must. It is known that dangerous industries, such as nuclear power plants, aviation or space missions have already a well established history in studying and addressing human error, through various methods, from Bayesian calculations of HEP through going beyond the label of HE, and searching deeply for systems design prone to errors, when other contributive factors correlate for allowing human errors to pass the multiple protective barriers. The aim of this paper is to look whether pharmaceutical industry is aligned with the fashion of human error assessments observed in the mentioned high risk domains. **Material and methods:** A scientific literature screening has been conducted in order to observe if pharmaceutical industry is studying and addressing the human error. This is performed by evaluating the articles and papers available on bibliographical and bibliometric Web of Science Core Collection database, where the abstracts of more than 12.200 scientific journals and 160.000 scientific conferences are available. **Results:** The number of papers addressing human error in pharmaceutical industry is extremely low (6 papers) comparing with the multitude of human errors records available from other domains (5485 records), among which the first positions are taken by engineering industrial (14%), engineering electrical electronic field (12%), followed by ergonomics (9%). **Conclusions:** In order to improve investigation processes of deviations or complaints, to protect the public health, to increase equipment availability and improve yields and performance, while delivering high quality, safety and efficacy medicines, addressing the human component, as part of the pharmaceutical system must a prerogative and more scientific presence is needed.

Keywords: human error, pharmaceutical industry, quality systems

ANTIBIOTICS, AS XENOBIOTIC RESIDUES IN HONEY-A HEALTH HAZARD

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Background: Honey contamination has become a global health problem, causing microbiological hazards. The main purpose of this review is to investigate the effects of antibiotics as honey contaminants, by highlighting their impact on human health. **Material and methods:** This paper provides review information of scientific literature, available on Pubmed, Science Direct and Google Scholar, published in the last 10 years, related to honey adulteration. **Results:** Antibiotics are used by beekeepers in higher doses to treat infections in the hive, or as growth promoters at low doses. Among antibacterials detected in honey, different studies mention the following: aminoglycosides (streptomycin), macrolides (erythromycin), sulphonamides (sulfathiazole, sulfamethoxazole, sulphanimide, sulfadiazine), tetracyclines (tetracycline, oxytetracycline, doxycycline), chloramphenicol. At very low doses, antibiotics may produce allergic and hypersensitivity reactions, cutaneous eruptions, dermatitis, gastrointestinal symptoms and even anaphylaxis. Antibiotic resistance, microbiologic risks, carcinogenicity, reproductive consequences and teratogenicity are mentioned as long-term effects of exposure to antibiotic residues. **Conclusions:** Since in EU countries antibiotics are prohibited in beekeeping, there are no MRL values for antibacterial substances in honey. The safety of honey consumption can only be ensured by complying quality assurance with international certification standards and legislation.

Keywords: honey contamination, antibiotic resistance, xenobiotic residues

EXPERIMENTAL DESIGN-BASED APPROACH FOR THE SIMULTANEOUS SEPARATION OF ALBENDAZOLE AND ITS IMPURITIES

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Background: A new trend in the chromatographic method development is the analytical quality by design conception. Due to the potential to reduce the probability of human mistakes and the number of out of specification cases, this concept is highly welcomed by the regulatory authorities. The goal of this study was the renewal of an underperforming European Pharmacopoeia method, using a generic workflow of analytical quality by design concept, to improve analysis time and method selectivity. **Material and methods:** The systematic method development was realized, using experimental design-based retention modeling. To minimize the analysis time an ultra high performance liquid chromatography (UHPLC) system was used for development. In the preliminary screening phase temperature-gradient time bidimensional model was chosen to aid the selection of the proper stationary phase. Hereinafter temperature-pH-gradient time tridimensional model was applied for the optimization of critical process parameters. The simulation and *in silico* robustness testing were realized using DryLab modeling software. **Results:** In the preliminary screening, three different chromatographic columns were tested (C18 fully-porous, C18 core-shell and C18-PFP type columns). The selection criteria were the peak shape and the number of separated peaks. Two columns were selected for further optimization regarding the pH of the mobile phase. In both cases, after 12 experimental runs, a tridimensional temperature-gradient time-pH model was constructed and the design space was visualized, where the methods meet the critical quality attributes. The selected working points were tested with confirmation runs to prove the validity of the models. The robustness and the impact of individual factors on the separation were evaluated *in silico*. **Conclusions:** After a scientific-based approach, a small number of experiment input chromatographic runs were utilized to construct virtual separation models. Based on the constructed models, numerous potential working points were initiated to replace the old Pharmacopoeia method for the simultaneous separation of albendazole and its impurities.

Keywords: Albendazole, chromatography, quality by design, experimental design, modeling software

PSYCHIATRY

BURNOUT PERSONALITY - A NEW PERSONALITY PROFILE: TRAITS AND DIMENSIONS WHO DESCRIBE IT

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Background: In these times, when the labour market is constantly changing and more and more people are running out of work or have to adapt themselves to the new conditions imposed by the pandemic, the burnout syndrome is increasingly present in the lives of employees. The present study is a novelty in the research of personality and brings an interesting proposal in this field: a new personality subtype, specific to subjects who are prone to the burnout syndrome, and we called it Burnout Personality. **Material and methods:** We evaluated the burnout syndrome on 192 subjects. The subjects involved in the study are doctors, nurses and teachers, the professions most affected during this period and very prone to burnout. We used for burnout syndrome Maslach Burnout Inventory and for personality DECAS and PID5. **Results:** The Burnout Personality can include following traits and dimensions: low Agreeableness and Emotional Stability, as well as Anxiety, Depressiveness, Anhedonia, Hostility, Eccentricity, Restrictive affectivity, Unrealistic beliefs, Suspiciousness and Withdrawal. **Conclusions:** Knowing a personality type prone to the burnout syndrome is salutary in order to avoid the occurrence of this syndrome by taking preventive measures.

Keywords: burnout syndrome, type of personality, dimensions of personality, traits of personality, evaluate

DIMENSIONAL PERSONALITY CHANGE AFTER COMBINED THERAPEUTIC INTERVENTION IN BURNOUT SYNDROME

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Background: The present study proposes a combined therapeutic approach to burnout syndrome because until now burnout syndrome has been treated using allopathic drugs. The aim of the study is to note to extent to which progressive relaxation with guided imagery combined with psychological counseling leads to changes in the personality of the subjects. **Material and methods:** The study included a number of 30 subjects who were diagnosed with burnout syndrome. Burnout patients were evaluated for burnout syndrome using Maslach Burnout Inventory and for personality using DECAS, PID5 and Survey of Work Styles. We alternated the sessions of progressive relaxation with guided imagery with psychological counseling using a general therapeutic plan for all patients but we took into account the particularities of each case. **Results:** Following progressive relaxation with guided imagery and psychological counseling sessions, there were significant changes in Agreeableness, Extraversion, Emotional Stability, Impatience, Anger, Work Involvement, Job Dissatisfaction, Competitiveness, Time Urgency and significant differences in almost all personality traits evaluated with PID5 before and after therapies. **Conclusions:** Using the two therapies, aspects of the dimensions and personality traits were modified, helping to increase their quality of life.

Keywords: burnout syndrome, dimensions of personality, traits of personality, progressive relaxation with guided imagery, psychological counseling

PUBLIC HEALTH

REIMBURSEMENT OR ACTUAL MEASURED COSTS: WHAT TO USE IN HEALTH ECONOMIC ASSESSMENTS? THE CASE OF ROMANIA

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Background: Resource allocation decision-making relies on health economic studies; however, these could be greatly influenced by the methodology used for cost assessment. The scope of our study is to evaluate the differences of health economic study outcomes when using reimbursement data versus real world cost data. **Material and methods:** Numerous countries have reported discrepancies in reimbursement and real costs of medical services all over the world, with few countries having an efficient and transparent system cost measurement-based reimbursement system, such as Germany, while others are taking steps towards improving their reimbursement system. To assess the possible discrepancies in Romania, we have analysed inpatients care real world cost data for two pathologies: heart failure and stroke. **Results:** Using the real-world cost data from a representative set of Romanian hospitals, based on cost measurement performed based on controlling principles, the real inpatient care cost of stroke was EUR 995.57, while for heart failure patients it was of EUR 641.58. The average weighted amount reimbursed through the DRG payment system received by the hospitals for these cases sums up to EUR 740.33 for stroke patients and EUR 444.74 for heart failure patients. In order to reach the total reimbursement per case, salary subsidies also need to be added, along with the revenues from national health programs applicable to these patients, but it is difficult to evaluate this amount at patient level, due to lack of transparency of allocation rules. **Conclusions:** Because of the specific Romanian inpatient financing mechanisms, including their deficiencies, the DRG reimbursement does not cover the costs of treatment of stroke and heart failure patients, thus using these amounts in health economic assessments would bring to misleading conclusions.

Keywords: Cost, HTA, Reimbursement, DRG, Health economic assessment

RADIOLOGY

CORRELATION ANALYSIS OF CONTRAST-ENHANCED CT IMAGING OF METASTATIC LYMPH NODES IN COLORECTAL CANCER

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Background: A preoperative staging of colorectal cancer (CRC) by imaging techniques such as computed-tomography (CT) is crucial especially concerning the N-stage, the presence of positive lymph nodes (LNs) influencing the management of the patient. Features like number, size, as well as shape, aspect and borders are being used by radiologists to predict nodal involvement. Furthermore, there could be a correlation between enhancing pattern on contrast-enhanced CT (CECT) and the presence of metastasis in LNs, that could additionally increase the accuracy of detecting them. The aim of this study is to evaluate the correlation between morphologic criteria and enhancement patterns in metastatic LNs. **Material and methods:** A total of 116 patients with CRC that underwent surgery were preoperatively evaluated by CT scans. The imaging assessment of LNs was made by using a map of LNs stations (locoregional, intermediate and central). All identified LNs on CT were divided into three groups by short-axis diameter (10 mm). Suspicion criteria were considered roundness, heterogenous structure and irregular borders. The enhancement patterns of the LNs were divided into five types (homogenous, dotted, linear, central and peripheral). The imaging findings were then correlated with the pathological results after surgery. **Results:** From a total of 1094 LNs identified on CT, 239 were considered suspicious according to the imaging protocol and 170 were confirmed by pathology. Most positive LNs were larger than 10 mm. The sensibility and specificity in our study was 82% and 69% respectively. Regarding the enhancement pattern, dotted and peripheral patterns were most correlated with metastatic LNs, while homogenous pattern was found mostly in negative nodes. **Conclusions:** The enhancement pattern of LNs in CRC can be considered a reliable imaging predictor of nodal involvement and, in addition to morphologic criteria, could improve the accuracy of detection.

Keywords: colorectal cancer, lymph nodes involvement, imaging, pattern enhancement, computed-tomography

SURGERY

NEUTROPHIL-TO-LYMPHOCYTE RATIO IN CASE OF RECTAL CANCER PATIENTS PROVES TO BE AN IMPORTANT PROGNOSTIC MARKER

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Background: It is well known that tumor progression is highly influenced by systemic inflammation. Based on this, it has been suggested that high values of neutrophil-to-lymphocyte ratio (NLR) could lead to a poor prognostic in rectal cancer patients. Our main aim was to define the influence of NLR value on patients survival rate. **Material and methods:** We performed a retrospective study during 2013-2019 at the 2nd Surgery Department, within the Emergency Clinical County Hospital from Targu Mures, Romania. Only adult patients diagnosed with rectal cancer were included, where preoperative laboratory results were available.

Results: The study included 337 patients. The cut-off value of the NLR was defined at 4.78. Significant correlation was observed between high NLR values and advanced tumor stage ($P=0.019$). Similarly, significant association presented between high NLR cases and total mesorectal excision (TME) quality ($P=0.042$), due to the considerable tissue inflammation, meaning that in cases with increased NLR values the TME was incomplete. The NLR value significantly influenced the patients overall survival rate ($P=0.032$). **Conclusions:** In terms of survival and recurrence high values of NLR could be used as unfavorable prognostic factors. However, further multicenter studies including large number of rectal cancer patients should be performed in order to the NLR to become an independent prognostic marker. This work was supported by the Collegium Talentum Programme of Hungary.

Keywords: neutrophil-to-lymphocyte ratio, rectal cancer, prognostic marker

LAPAROSCOPIC VS ABDOMINAL SACROCOLPOPEXY USING SELF-FIXATING MESH

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Background: Sacrocolpopexy can be described as an abdominal operation that connects the top of the vagina to the sacrum bone using a synthetic mesh. This mesh is fixated to these structures using different fastening means. Many studies present this operation as having a success rate of 90%. The aim of this study is to compare the laparoscopic vs abdominal sacrocolpopexy using self-fixating mesh. **Material and methods:** We performed a prospective, comparative study in which we enrolled 6 patients with pelvic organ prolapse of grade 2 or higher admitted in Surgical Clinic No.1, Emergency Clinical County Hospital of Targu Mures, between November 2019- March 2020. Group 1 included patients in whom laparoscopic sacrocolpopexy was performed. Group 2 included patients in whom abdominal sacrocolpopexy was performed. Parietex ProGrip™ Self-Fixating Mesh was used for both types of surgical approach. **Results:** No complications or recurrences of prolapse were detected at 1, 3 and 6 months postoperatively in both groups. Mean operative time was 211 ± 12.58 minutes (group1) vs 83.33 ± 7.64 minutes (group 2). The period of hospital stay was 3 days in group 1 compared to 6.66 ± 0.58 days, in group 2. **Conclusions:** The results of this surgical procedure performed either by laparoscopic, or abdominal approach demonstrates that Parietex ProGrip™ Self-Fixating Mesh can be used without complications. The advantages of using this mesh are represented by the fact that it does not require other fastening means and the fixating process is fast. The use of this kind of mesh for the laparoscopic sacrocolpopexy is more difficult compared to the abdominal approach, having a higher operative time.

Keywords: laparoscopic sacrocolpopexy, abdominal sacrocolpopexy, self-fixating mesh

STUDY OF FACTORS ASSOCIATED WITH AN INCREASED RISK OF LIMB EVENTS IN SUBJECTS WITH SYMPTOMATIC PAD

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Background: Advanced atherosclerosis in the lower extremity is considered the iceberg of cardiovascular disorders, which in diabetes or chronic kidney disease doubles the risk of cardiovascular mortality and quadruple the risk of amputation. The aim of the study was to investigate the major conditions that associate with an increased risk of limb events including amputation.

Material and methods: We retrospectively analyzed demographic and cardiovascular risk factors of 101 patients admitted in the Vascular Surgery Department of the Mures County Emergency Hospital, presenting with symptomatic peripheral artery disease of the lower limbs and stenosis of carotid artery and who underwent conventional transluminal angioplasty. **Results:** The mean age of the patients was 66.35 ± 8.31 . Among them, 77.2% belonged to male sex, with a significant difference ($p < 0.001$) between the two sexes. The biopsy material was in 42.5% cases from the femoral-popliteal axis, 23.8% from the femoral artery, 20.8% cases from the carotid artery. Most cases (21) concerned the femoral-popliteal axis in males aged between 50-59 years, compared to females, where carotid involvement predominates in patients aged between 60-69 years. 76 patients presented hypertension, and in correlation with the location of the disease, almost half (44.7%) of them with the lesion at the femoral-popliteal axis. Diabetes was present in 30 of the patients, being correlated with a preponderant localization of the diseases at the level of the femor-popliteal axis. Out of a total of 101 patients, 63 confessed the active tobacco consumption, having the location of the lesion mainly in the femoral-popliteal axis (47%). Amputation was required in 33 cases. There was no significant difference between those who needed amputation and the rest of the patients enrolled in terms of sex ($p=0.53$) or body mass index ($p=0.79$). **Conclusions:** Peripheral arterial disease mainly affects men, in the 7th decade of life, having as location the femoral-popliteal axis, amputation being necessary in 32% of cases.

Keywords: peripheral artery disease, risk factors, femor-popliteal axis, stenosis, conventional transluminal angioplasty

UROLOGY

ANALYSIS OF NON-MUSCLE INVASIVE BLADDER CANCER DATABASE IN CLINIC OF UROLOGY TARGU MURES

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Background: Bladder cancer is one of the most common urinary tract tumor, ranking second after prostate cancer. About half of these newly diagnosed tumors are low-grade malignancies (LGs) and about 70% are non-muscle invasive bladder cancers. **Material and methods:** A retrospective study involving 463 patients who underwent transurethral bladder resection at the Urology Clinic of Targu Mures between January 2016-June 2020. Inclusion criteria: patients with pTa, pT1, in-situ carcinoma (CIS) bladder cancer and surveillance data. Mortality was assessed via National Insurance Database. **Results:** From the total 463, 381 patients met the inclusion criteria. The mean follow-up period was 72 months. The mean age was 69.3 years, 251 patients had pTa (65,8 %), 117 pT1 (30,7%) and 13 cases of CIS (3,41%). Recurrence was observed in 234 (61,4%) and 73 patients deceased (19,1%). Overall survival was 80,9% at 72 months follow-up. **Conclusions:** The incidence of non-muscle invasive bladder tumors is on the rise. Their early detection, proper treatment, and accurate follow-up are of great importance regarding progression and recurrence.

Keywords: Non-muscle invasive bladder cancer,, recurrence,, progression

UROLOGICAL PRACTICE DURING COVID-19 PANDEMIC IN TÂRGU MUREŞ

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Background: The COVID-19 infection became the highest medical challenge in our days, with consequences on the healthcare system activity. The elective urological surgeries were canceled or postponed due to the high risk of COVID-19 infection, reduced medical resources and number of beds or limited number of healthcare workers from the hospital. The emergency cases were selected and treated under strict caution with adequate equipment. **Material and methods:** We performed a prospective observational study from 06 April 2020 to 29 May 2020 that comprised 102 patients who were admitted for suspected infection with SARS-COV2 having urological or non-urological associated comorbidities. **Results:** The suspicion of COVID-19 infection rate was more frequent encountered in men (61,8 %) compared with female patients(38,2%). The mean age was 52.77 years. From the total of 102 patients only 25 (24,5%) were confirmed with Covid 19 infection including 4 (3,92%) with urological pathology. Associated urological pathology was diagnosed in 23(22,54%) of the cases and 79 (77,45%) presented no urological disease. 7 patients presented indication for urological procedure: suprapubic cystostomy (1 patient), nephrostomy tube insertion (3 patients), ureteral stent insertion (1 patient), urinary catheter insertion (2 patients) The statistical analysis revealed that there was no statistical correlation between the number of patients diagnosed with SARS COV2 infection and urological patients, $p > 0,005$ ($p = 0,95$.) **Conclusions:** The COVID-19 pandemic is an enormous challenge for everyday practice, including urology, because of the delay of urological services, especially in oncological cases.

Keywords: urological patients, healthcare workers, COVID-19 pandemic, urological surgeries, urological pathology

IS NOCTURIA A NEGLECTED SYMPTOM?

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Background: Nocturia belongs to the group of LUTS, which means that patient must pass urine at least two times at night. It affects the population regardless of age and gender. Etiology is multifactorial. As a result of nocturia, the normal sleep period is

interrupted several times by having a negative effect on quality of life and health condition, so this symptom should not be neglected from the patients or healthcare professionals. The aim of this study is to draw attention to this symptom and offer targeted therapy. **Material and methods:** A prospective study was conducted which targeted patients who presented for consultation at the Urology Clinic in Târgu Mureş. These patients completed questionnaires regarding their lower urinary tract symptoms. This questionnaire was not a validate one. **Results:** From the respondents (69 patients) 85.5% had symptoms of nocturia. Nocturia was more frequent in males (43:16). This symptom became more frequent and accentuated with age ($p < 0.0001$, $r = 0.43$). Only 15 patients (25.42%) find this symptom quite disturbing and state that sleep duration and its quality are affected, respectively it has a negative effect on the quality of life. Half of those (57.6%) with nocturia symptoms have been approached with this problem by a specialist. Nocturia is present in a significantly increased proportion ($p = 0.029$) in patients with BPH. The overactive bladder has no significant relationship with nocturia ($p = 0.17$). **Conclusions:** The prevalence of nocturia has a tendency to increase with age, and the symptoms become more and more significant. Nocturia affects the quality of life by affecting the sleeping process and daily performance, however, it is a neglected symptom on the part of both patients and physicians. Treatment should be individualized according to the etiology and degree of patient involvement. Questionnaires and micturition diary are needed to objectivise the symptomatology and to state its impact on quality of life.

Keywords: nocturia, symptom, quality of life

THE PLACE OF UROFLOWMETRY IN THE MANAGEMENT OF CHILDREN'S CONGENITAL ANOMALIES

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Background: Introduction and Objectives. Many of congenital anomalies of the urogenital tract affects micturition. Based on recent published EAU-ESPU data, 20% of schoolaged children present lower urinary tract symptoms. Urodynamics mainly uroflowmetry have an important role in the correct diagnosis of these dysfunctions. The objective of this study is to emphasize the importance of uroflowmetry in the evaluation of children presenting LUTS, with different congenital anomalies of the urinary tract. **Material and methods:** Material and methods. A retrospective study (2018-2019) which processed urodynamic data of 29 children with congenital disorders presenting LUTS. **Results:** Results. Mean age of children was 10, 54 (3-16) years, mainly girls (17). Congenital anomalies of the urinary tract were the following: vesicoureteral reflux 16 patients, renal duplication 2, solitary kidney 1, renal cyst 2, uretral orifice stenosis 3, phimosis 2, and hypospadiasis 3 cases. Associated LUTS symptoms were mainly mixt (storage and voiding) frequently encountered: increased daytime voiding frequency, nocturia, decreased daytime frequency, urgency, incontinence, nocturnal enuresis, straining, weak stream, dysuria. A total of 24 cases presented more than one symptom. Other symptoms: holding maneuvers, feeling of incomplete emptying, incomplete urinary retention, post micturition dribble, lombar pain were also encountered. Uroflowmetry datas were the following: bladder capacity : 98-400ml, Q max :3-42 ml/sec, PVR : 0-200 ml. Curve patterns: bell shaped 15, tower 6, staccato 4, interrupted 10, plateau shaped curve 8. **Conclusions:** Conclusions. LUTS in children especially the one associated to urinary tract anomalies should have a multimodal evaluation, based on minimal invasive procedures. In case of children the most common urodynamic investigation is uroflowmetry, pressure flow studies and cystometries are indicated in refractory, complicated cases.

Keywords: uroflowmetry, children urinary disorders, vesicouretral reflux, LUTS

THE PSYCHOLOGICAL IMPACT OF COVID-19 PANDEMICS: A COMPARISON BETWEEN UROLOGICAL AND OBSTETRICS-GYNECOLOGY HEALTHCARE WORKERS

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Background: Recent studies raise a concern about the high psychosocial impact of the COVID-19 outbreak among frontline healthcare workers. The purpose of this study is to evaluate the state of mental health among employees of The Clinical County Hospital of Târgu-Mureş, the Clinics of Urology and Obstetrics-Gynecology I. **Material and methods:** The psychological distress caused by the pandemic and its impact was assessed considering the fear of COVID-19 and the reaction to stress, using a 21-item

questionnaire. The study groups were formed: (1) 105 workers from The Clinic of Urology, which was destined to treating COVID-19 patients; and (2) 103 from The OBGYN I Clinic (non-COVID-19), ages between 23 and 64 years old ($M = 42.43$, $SD = 10.56$), surveyed in May - June 2020. **Results:** Results emphasized differences between the two groups regarding fear of COVID-19 ($t = 2.61$, $p = .010$); perception of stress level ($t = 3.48$, $p < .001$); fear of danger at work ($t = 4.10$, $p = .001$); fear of going to work ($t = 2.71$, $p = .007$); fear of returning home after a day at work ($t = 4.67$, $p = .008$); avoidance from family members ($t = 2.86$, $p = .005$); perception of protection ($t = -3.97$, $p < .001$); feeling of adequate rest time ($t = -3.91$, $p < .001$). The following statistically significant correlations with fear of danger at work were found: fear of COVID-19 ($r = .59$); MPQ-RS test ($r = .58$); perception of stress level ($r = .54$); fear of going to work ($r = .62$), and fear of returning home ($r = .62$). **Conclusions:** Statistically significant differences were found between the mental health statuses of healthcare workers caring for COVID-19 patients compared to non-exposed employees. Training and preparation for future epidemics or disasters are strongly recommended.

Keywords: fear of COVID-19, healthcare workers, mental health, psychosocial impact, stress reaction

**CONFERENCE OF PHD STUDENTS AND YOUNG DOCTORS.
SCIENCE AND TECHNOLOGY**

ȘTIINȚE ALE COMUNICĂRII

WRITTEN COMMUNICATION IN LOCAL NEWSPAPER "STEAUA ROȘIE"

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Background: WRITTEN COMMUNICATION IN LOCAL NEWSPAPER `STEAUA ROȘIE` My thesis`s OBJECTIVE is to investigate the history, theory and operations of the written communication through the local press, the newspaper initially called `Steaua roșie`, later renamed `Cuvântul liber`. **BACKGROUND:** Press influences in a long or medium term the value judgments but also the choices that people make or the decisions they take. Simultaneously, it models human personality cognitively, emotionally and behaviorally, and for this reason, we will study closely the theory of dependence cultivation, theory that belongs to the american writer Walter Lippmann and the way this theory was implemented during the 60 years of the local press existence. As **KEY WORDS** of my thesis I could mention: commitment towards truth, changing society, printed press, censorship, interethnic conflicts. As regarding the **RESEARCH METHODOLOGY**, in addition to the traditional, analytical and descriptive approach, there is also the discursive, anthropological and iconological approach. From a methodological point of view, we will practice document analysis, we will request interviews, according to a structured guide, from journalists, writers, proofreaders. Regarding the first four decades, we will approach the relationship between ideological and cultural pages (considering different chapters for the proletarian period, the relative liberalization, dictatorship period). As for democracy, we will analyze journalistic attitudes at the level of language for or against certain topics. The composition of the printed press suffered an extensive change during the six decades of its existence, but especially after the revolution of 1989, when liberalization efforts were obvious and all old taboos have been removed, local press promoting public transparency and comforting worldwide prompt and frank information. **CONCLUSIONS** This work highlights the local reality, the local socio-cultural reality because the newspaper `Steaua roșie` was a strong promoter that completed for several decades the picture of the Mureș`s society.

Keywords: STEAUA ROȘIE, commitment towards truth, changing society, printed press

HISTORY

23 AUGUST 1944 ÎN REVISTA "MAGAZIN ISTORIC"

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Background: The magazine "Magazin istoric" has had an uninterrupted existence since 1967 and until today. It was conceived as an information magazine for the broad masses of the people, a communist propaganda magazine in the field of history. The purpose of the research is to analyze the way in which the act of August 23, 1944 was reflected in the pages of this magazine. Of course, the communists considered this historical act as a decisive one for the development of Romania. The Romanian Communist Party was considered the initiator and perpetrator of the coup d'etat of August 23, 1944. After the anti-communist revolution of December 1989, historians reinterpreted the act of August 23, 1944: the role of King Mihai and other politicians in the coup was recognized.

Keywords: August 23, 1944, Historical Magazine, communist historiography

DELIMITARI ALE SINELUI. CONFIGURARI TEORETICE

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Background: The purpose of this paper is to underline the fine structures that comprise each character's self during one's journey throughout the written literary discourse. The idea of the "controllable" self is surreal and unobtainable. The unconscious manifestations of ourselves are the things that make us authentic, understood/misunderstood, relatable, and one of a kind. Although it is very hard for us to "own" and take responsibility for all our actions, they are part of our atomic manifestations of the universe's particles - a wonder. Becoming is our purpose whether it is easy or strenuous - both ways lead to a "whole". The concepts here explored were those postulated by Sigmund Freud, Carl Gustav Jung, William James, and other pillars of psychoanalysis and psychology.

Keywords: self, conscious, unconscious, identity

CELE MAI VECHI VESTIGII ALE SCRISULUI ÎN SPAȚIUL ROMÂNESC

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Background: The article analyzes some stages in the evolution of writing, synthesizing the period between Antiquity and the modern era; it also emphasizes the significance of the discovery of printing and its impact on Romanian and European civilization and culture. Various types of communication were used by humanity before the spread of writing (graphic signs, symbols), but the main graphic tools used to communicate a notion, a thought, an idea are specified in the article as well. Once the written communication method was established, the book appears, and soon, the libraries arise. The first libraries contained papyrus scrolls, clay tablets, manuscripts. Later, the libraries made the transition to documents written on paper and towards the contemporary electronic library. The article also analyses the situation of the prints in the Romanian space and of the alphabet used for their fulfilment in different periods of time. In writing, on the territory of our country the Slavonic, Greek or Latin alphabet was used. The Latin alphabet becomes the official alphabet of the Romanian countries during the reign of Alexandru Ioan Cuza, when those of other languages suffers a decline. In order to reach the current level of progress of written communication, an evolution of over three millennia has been necessary, during which this progress has often been slowed down by wars, conflicts, catastrophes, various social, political or economic events. In this context, the significance of books and libraries for the cultural memory of mankind is impressive.

Keywords: carte, bibliotecă, tipar, scriere

LIMBAJUL DIDACTIC ÎN OPERA LUI ION LUCA CARAGIALE

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Background: Personajele lui Caragiale aparțin aceleiași categorii sufletești, iar social și cultural se înscriu în spațiul asimilării civilizației europene. Acest aspect este pus în decalaj cu realitatea, cu acel amestec de idei și simțiri care fac diferența dintre aparență și esență, este vorba de un limbaj împeștiat cu cuvinte noi, în care incoerența e specifică pentru infirmitatea societății. Opera lui Caragiale se naște din realitățile sociale, din trăirea și înțelegerea acestora, educația fiind motivul său de bază în contemplarea cotidianului. Opera sa proiectează o lume reală, descrisă în termeni de cele mai multe ori ireali, prin slăbiciunile sale, ascunse sau retorizate, ce stă sub semnul unei viziuni coerente.

Keywords: educație, societate, viziune, limbaj, realitate

LITERARY REFLECTIONS IN CINEMATOGRAPHIC ADAPTIONS OF SADOVEANU'S NOVEL: "THE PLACE WHERE NOTHING HAPPENED"

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Background: One of the strengths of the Romanian director Dan Pita, which he demonstrated during his activity, is his literary culture, his ability to negotiate and operate in multiple registers of communication and languages offered by literary history. One of his reference projections is represented by the screening of one of Sadoveanu's decadent perfume novels: "The place where nothing happened", under a more attractive and commercial look: "The last ball in November". It can be said that the film announces the end, the premiere taking place in November 1989, just before the fall of the Ceausescu regime and the entry into the freedom era. Starting from the hypothesis of an indissoluble connection between the literary discourse and the film one, I set out to overcome the differences between the two arts, proving the existence of a same source of inspiration and a common type of imaginary. In the course of the paper I identified the specificity of the artistic code of literature and cinema, the ways of transposing the written text in the specific code of cinema, as well as the extent to which the transfer was conducted of aesthetic values from literary to the film, concluding that the film directed by Dan Pita complements the Sadovian's literature, bringing to light a lesser-known work of his, thus prolonging the public's interest in his work. I also noticed a balance in this process of artistic production, the filmmaker proving to be oriented in both directions: to the literary source, trying to correspond to the suggestions offered by it, and also to the spectator, trying to anticipate his emotional reactions and to give him an similar effect to that created by the literary work.

Keywords: Literary, Film, Sadoveanu

THE AESTHETICS OF SPACE IN CONTEMPORARY AMERICAN IMMIGRANT WRITING

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Background: This paper intends to reveal how the writings of contemporary American immigrants have the power to challenge the boundaries of Self, as well as those of the cultural climate and social context in which the authors' characters and alter egos evolve, rethinking great concepts of literary theory and cultural anthropology such as geography, space, narrative, and identity. We aim at providing an enhanced understanding of the aesthetics of space in contemporary American immigrant literature as we focus on the work of four new immigrant writers from different locations, cultures, and socio-political contexts - Aleksandar Hemon, Junot Díaz, Chimamanda Ngozi Adichie, and Ocean Vuong. In order to reach this goal, we intend to investigate the contemporary cultural climate in the United States in relation to their literary production by exploring postcolonial concepts such as cultural marginality, third space, liminality, doubleness of conscience. Moreover, these four writers have more in common than their marginal, immigrant status. Rethinking questions of identity, space, and storytelling, they offer new perspectives on the American selfhood and contribute to the emergence of a new aesthetics in contemporary immigrant writing.

Keywords: space, narrative, liminality, third space, identity

NEW TRENDS IN HUMANITIES

WHAT DOES THE LEFT HAVE TO SAY ON POLITICAL CORRECTNESS FOR HERSELF?

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Background: Inside the fight between the Right and the Left concerning the ideology of American Political Correctness also known and easily recognized by many as PC, a long list of uncertainties can be identified among the theories that are practised and their national and international echoes. One of the first examples is the name itself which now states for the ways people need to talk in order to protect the disadvantaged groups of different nature. Many important American politicians were known to encourage and sustain a positive vision on those who were seen as inferior, different, special or sensitive on the marketplace. Through reconstructed language and given phrases, the ones that had the power in society at a point tried to and focused on reinforcing the edges of a new thinking under the motto of protecting and carrying for each other. The good intentions were quickly followed in time by (r)evolutions that have changed the premises and turned the data in various battles of groups formed by the people without any disadvantages, but with some purposes. Some of the defining features of the Left regarding the intrinsic aspects of PC are found in the permanent action of resistance against the Right, contrast next to which its forming items are being overwhelmingly attached to the Good or the Bad. In fact, the theories promoted by the Left were used against itself through the tentacles of the Right in action. In what sense the group rights affect the individual rights and freedom? The question has the shape of the Right, but the answer must be delivered by those of the Left that are asked to prove the minorities they protect are not the danger of an upside-down reflection for the majorities and mostly for the individual.

Keywords: political correctness, the Left, minorities, individualism, language representation

LIFE-ALTERING DECISIONS IN AN INTERGENERATIONAL BLACK FAMILY IN RED AT THE BONE BY JACQUELINE WOODSON

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Background: Movements such as Black Lives Matter colliding with a forceful racism is what leads down a path of neverending war. The majority of people might turn a blind eye to it, nevertheless Jacqueline Woodson writes such a profound book in which raw emotions come into being, backgrounds and origins come together. Layer by layer we uncover a world of a mesmerizing history, race, sexuality, gender and family. We face teenage pregnancy, racial discrimination, sadness and dismal taken to extremes. Truncated thoughts and paragraphs give an overview, snapshots of fleeting moments, of three generations of a black Brooklyn family. The author manages to address myriads of historical events such as the 1921 Tulsa race riots or 9/11. **Methodology:** In terms of methodology we have used ethnographic research, more specifically digital ethnography which employs the use of social media and online blogs. Furthermore, we have used narrative inquiry, a relatively new qualitative methodology focusing on experience including its various components: temporality, sociality and place. **Results:** As we follow the protagonist's stories, their sincerity, their own quest for identity unfolding through time and space put together like shards of glass we are faced with every life changing decision they make and how it will impact both them and the generations to come, even without their knowledge. Furthermore, we should all focus our attention on such social aspects since we all face decisions every day of our life, sans cognizance. The more we know about how people think, the more we will be able to understand them and lessen our judgmental natures from what we were also previously taught.

Keywords: racism, gender, racial discrimination, African-American, quest for identity

THE PERVASIVE BURDEN OF THE PAST IN THE GIRL WHO WROTE LONELINESS BY SHIN KYUNG-SOOK

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Background: Abstract: The past is similar to an emotional well looming in the shadows bringing ever so often flashbacks and memories from the deepest corners of our minds. Writing to understand yourself is the main theme of the book closely woven into the fabric of past events in an oppressive political atmosphere characterized by turmoil and uncertainty. The perspective goes back and forth in time between the narrator at sixteen to twenty years old to her present state of the most famous Korean author at the age of thirty-two. Despite the bleak subject matter, the Korean industrial sweatshops, we are also presented with dream chasing and family dynamics. The book is meant to bring you closer to humanity, to errors, to life itself and the myriad of choices that made us who we are. **Methodology:** In terms of methodology we have used ethnographic research, more specifically digital ethnography which employs the use of social media and online blogs. We mainly focused on interviews the author gave and how she viewed her book correlating them to the book itself. Additionally, we have used narrative inquiry, a contemporary qualitative methodology pivoting on experience and its various components: temporality, sociality and place. **Conclusions:** Kyung-Sook Shin's book is thought-provoking, meaningful and the cynosure is on the haunting past. It can be viewed as a fictional autobiography, the author refuses to give names and instead chooses to maintain the anonymity of her characters by calling them Third Brother or Cousin. Loneliness affects a multitude of people in unbeknownst ways, deeply hidden from foreign eyes but the author's quest is to reveal as much as possible while debating and struggling to select what she wants to actually disclose.

Keywords: family dynamics, identity, memories, turmoil and uncertainty

PHYLOLOGY

INFERNUL DISCUTABIL

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Background: Expressionism tends to a new beginning. The poet absolutizes his experiences by attributing to the poet and poetry an absolute meaning. "The loneliness of the unhappy conscience" is the condition of the expressionist poet who proposes absolute lyricism. The beginning period of Ioan Alexandru's creation falls within the stage of patriarchal poetic neo-expressionism. Its features are openness to the metaphysical, monstrous accumulations, meditation, the mythical, the return of the ego to its origins, the creation of an objective universe, expressively distorted images, the permanent need for the absolute, the aspiration for the ideal, the search for a spiritual reality. The debatable hell reveals a strongly expressionist poetry with images dominated by the patriarchal world. The volume corresponds to a crisis of division of matter and spirit, an abstraction in the contemplation of everyday patriarchal life where. Everyday life "is seen as hell" holding man "prisoner." The expressionism in this volume is distinguished by the dispersion of feelings, negativism and axiological oscillations through images that lead to suffocation and disgust. Revealing the banal in an abstract and original way, the rustic images that enclose the lyrical universe of the poet, horses, buffaloes, frogs, plains, hills, sea, milk and the need for truth, the expressionist contour of a patriarchal world, segmented, confused and slightly ironic they are constants of the lyricism of the sixties poet. Poetic discourse has become in the questionable reflexive, reconfiguring Hell of the world around us. The words hide the abysses of hell, the poet travels like a dream through a world of absurdity, suffering, fear and helplessness from which he cannot escape and from which only fragments are scattered here and there, all being lost early. **Material and methods:** The paper proposes a methodological, analytical and descriptive approach, using literary criticism, the work of Ioan Alexandru (the volume *Infernul diskabi*), but also the articles and documentaries about the volume "Infernul Discutabil". **Results:** Systematic analysis of the poetry from the volume "The debatable hell" as expressionist poetry **Conclusions:** Poetic discourse has become in the questionable reflexive, reconfiguring Hell of the world around us. The words hide the abysses of hell, the poet travels like a dream through a world of absurdity, suffering, fear and helplessness from which he cannot escape and from which only fragments are scattered here and there, all being lost early.

Keywords: expressionism, poetry, negativist

SCIENCE AND TECHNOLOGY

AIR QUALITY AND ITS INFLUENCE IN THE TOURISM INDUSTRY

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Background: In the current context, one of the major motivations of travelers is to avoid ordinary and crowded environments. Tourists search for places with a pleasant atmosphere, a relaxing environment with multiple opportunities for physical and psychological recreation. Tourism can have both positive and negative effects on the economic and sociocultural field and on the environment. Natural and cultural resources represent the core foundation/support for the development of tourist destinations, and the negative impact on these resources leads directly to depletion and degradation of tourist packages and indirectly to health conditions of the pawn of this industry- the tourist. **Material and methods:** The base of the present research is the synthetic review of the practical problems, application of sustainability indicators, sustainability and tourism competitiveness expressed in case studies applied at national level. Based on the collected data from the field and with the support of stakeholders we will create a database of tourist destinations based on the air quality in Romania. By purchasing or sponsorship with air measuring instruments, a comparison will be made between air quality in urban areas (Târgu-Mureş) and rural areas (Ibăneşti-Pădure) **Results:** he paper seeks to answer the many questions of these types of research in Romania. An important result will be the validation (or not) of the main hypothesis:air quality influences the number of tourists and increases the competitiveness of tourist destinations **Conclusions:** Sustainable development of the tourism industry arises from the interest of tourists and stakeholders, to conserve the environment. Sustainable tourism develops responsible consumption. Natural resources are the basis of tourism industry; the continuous degradation of these resources affects the competitive position of tourist destinations and decreases the number of tourists.

Keywords: sustainable tourism, air quality, healthy travel, competitiveness, competitiveness index, comparative quantitative analysis

THE PSYCHOLOGICAL CONSTRUCTS INVOLVED IN TIME MANAGEMENT, THE RELATIONSHIP BETWEEN TIME MANAGEMENT, WORK NORM AND WORKPLACE STRESS IN THE INDUSTRY

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Background: Work meets the needs of the individual such as the physiological, intellectual and social ones. Emotional intelligence (EI) assumed by national and international enterprises, represents over 60% of the skills and competencies needed for a leader and his team to achieve superior performance in the organization. In an enterprise, the duration of work is equal to the working time, and the employer has the obligation to standardize the activity of the employee including productive time. **THE AIM** is to observe the relationship between emotional intelligence and work management, compliance with the rules in the company and stress management in the workplace. **THE GOAL** highlights the emotional intelligence of the people involved in the AllstarProd organization and the management team, applied at individual and group level leading to increased production quality. Time is a limited resource and time management is important in maintaining the market. **Material and methods:** Time management questionnaires, measurement of emotional intelligence, measurement of stress. The sample consists of 140 randomly selected employees, divided into experimental and control group. The experimental group is given to perform the tasks provided in the job description, being monitored by work regulation, and the control group will not work under time pressure, making comparative statistical studies between the two groups, highlighting the importance of IE employees. **Conclusions:** A component of organizational behavior management is time management and standardization, being effective in reducing stress. Time management is the efficient use of resources to achieve personal goals and live comfortably. If the stress is high the performance is low, and if the psychological well-being improves in the organization, the stress is reduced, which in turn leads to work efficiency and increases productivity.

Keywords: poster, emotional intelligence, normalization, stress, time management

INCREASE COMPANY SUSTAINABILITY BY IMPROVING CUSTOMER SATISFACTION

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Background: Measuring customer satisfaction is one of the main elements that has come to the attention of companies and organizations in all fields in the last decade. As an indicator, customer satisfaction involves the entire staff of the company. It motivates employees to reach the highest standards and to constantly increase labor productivity. **Material and methods:** The main research directions aimed at systematizing the theoretical concepts regarding the ways in which various aspects related to increasing and evaluating customer satisfaction in economic activities carried out at the company level can be improved. Thus, we aimed at: analyzing the evolution of customer satisfaction, determining the mechanisms for assessing customer satisfaction by applying our own methods in correlation with economic indicators (profit, productivity, cost), developing and proposing solutions for growth and economic development at the company level by increasing customer satisfaction based on the results of this research. The general research methodology was based on three types of research: fundamental, applied and empirical. **Results:** In this context and evaluating the current state of customer satisfaction assessment, the main results are to propose a tool and a methodology proposed by the author, in the form of an indicator that includes both the classic elements of customer satisfaction and economic impact in the industrial field. By applying the new methodology and the proposed indicator, an increase was obtained both in the customer satisfaction and in the economic efficiency of the companies and implicitly of its performance. **Conclusions:** Regardless of how the ways of measuring customer satisfaction will evolve, one thing is certain, in order to achieve success in business, you need both economic efficiency and satisfied customers. Through the proposed indicator and methodology, we consider that we make an important contribution to the current specialized literature and fill a gap into clients satisfaction research.

Keywords: economic efficiency, analysis, customer service, management, sustainable

CUVÂNTUL ŞI CREDINŢA ÎN OPERA LUI SANDU TUDOR

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Background: The legend of the priest Daniil Teodorescu (Sandu Tudor), the founder of the "Rugul Aprins" movement, has grown significantly in the last period of time. The interwar press was under the research of Sandu Tudor, the future monk Agaton, a complex personality and a bright conscience. He was the leader of the newspaper "Credinţa" ("The Faith"). His articles are said to be of a left wing orientation. His writings were anti-legionary, and they reflected the Christian way of life in their lines. In his

writings he proves a healthy balance and common sense. Sandu Tudor wrote that: one's vision is the most important fact in the life of a man or a nation. It is the moment when the events of life burst forth in ourselves, with the inner and luminous unity of truth. In spiritual meditations, Sandu Tudor confesses that the country full of charm that we seek is already around us, in every day of our life. Also he states that people cannot live without miracles. We reach a stage of perfection if we persist in the understanding of the life and work of the writer. The work of abbot Daniil from Rarău had a mystical-religious dimension as the one of poets who compose under the power of inspiration. Religious poetry had a special place in Romanian culture.

Keywords: puterea inspirației, realitate spirituală, ortodoxism în literatură, acatiste, gândirism

PSYCHIC DEATH AND THE COURAGE OF TELLING THE TRUTH IN AUGUSTIN BUZURA'S WORKS

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Background: Augustin Buzura was an author that was deeply anchored in the reality of his own time, a lucid conscience, an alive spirit, a critic whose aim was to deface the infernal mask of communism. A persona with a thorough journalistic experience at Tribuna magazine from Cluj, Augustin Buzura took upon himself to express the truth through columns, but most of all through novels, in which he demasked the imposture, the demagogy and the corruption at its highest level, describing the phenomenon of moral breakdown in society. The novelist built his works around several concepts, such as truth, freedom of conscience and the struggle between man and its history, all of which were structured upon a central theme: psychic death - a notion which starts a riot against all of those ideas. This riot is perceived all throughout Buzura's literary works, especially through his characters, that in spite of the chaos surrounding them, are trying to maintain their firm lucidity. The novelist was forced to become acquainted with death early on in his life. He had felt it acutely ever since his youth, a time in which he was forced to support himself by working in a coal mine, while also studying medicine. He would describe the concept of biological death as a mandatory link towards some other entity, while also assigning another edge to it by implying that psychic death incapacitates a man's possibility of behaving like himself. This idea became the main theme of his works, next to other forms of alienation: solitude, hatred and vengeance. All of his characters believe in the idea of truth, their struggle sprouting from their own attachments to life and death, as governing themes of existence. The writer's mission was his core belief that truth had to be made extensively known, without any bias attached to it.

Keywords: Augustin Buzura, psychic death, curage,, truth

THE FANTASTIC AND THE IMAGINARY SPACE IN ȘTEFAN BĂNULESCU'S PROSE

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Background: Ștefan Bănuțescu, a mysterious personality, a perfectionist prose writer, challenges his readers to embark on an imaginary journey through the land in Dobrogea, between the Danube River and the Black Sea, using laborious descriptions, tempting them to get into an archaic, metaphysical world, in which the fantastic does not break out by chance, but is well-thought-out to disguise, most likely, a reality far too well-known. *Iarna bărbaților*, one of the most brilliant example of the sixties' work that attracted Romanian critics from the highest of literary circles to the originality of the prose, allows multiple readings and interpretations and oscillates between realism and fantastic prose. *Cartea de la Metopolis*, the only published novel of the tetralogy *Cartea Milionarului*, is, also, relevant to the present study. The writer's imaginary involves the use of fantastic, myths and symbols. These two volumes are remarkable for the imaginary map, spiritually significant places, carefully crafted monograph by the author and for connecting real areas with the fictional spaces. His writing is the formula of enduring art, that "ages" like fine wine with the passing of time. A large part of the approach is focused on the literary analysis of Bănuțescu's texts in order to highlight the type of fantastic specific to his works, relying on the following elements: space, myths, symbols, characters, literary themes and motives. In addition, some important studies of the authors Tzvetan Todorov, Roger Caillois and the literary criticism of Nicolae Manolescu, Alex Ștefănescu, Corin Braga, Eugen Simion, Georgeta Horodincă were mentioned in the study. This paper attempts to outline the interaction between myths, symbols, fantastic and to emphasize that Bănuțescu's imaginary space contributes to shape the dimension of fantastic.

Keywords: fantastic, myth, symbol, fiction, literary space

PRODUCT AND PROCESS CHANGE MANAGEMENT AND THE IMPACT ON ANALYSIS OF PERFORMANCE INCREASE

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Background: Background: A key aspect of change requests management is the efficient administration of changes in the product optimization process. This scientific study starts from implementation of a Management System which will be created and monitored all engineering change requests (ECR) from automotive division. An ECR is created and implemented in production system for optimization production flow. The research will analyze the system for ECR and the specific tool for monitoring of changes. The system is based on SAP instruments and we have the possibility to search all ECRs. The aim of the study is tracking and monitoring ECR by graphical and statistical methods of a valid model for these changes. **Material and methods:** For this research we used graphical and statistical methods for engineering processes, process modelling, analyzing of the working system from technical department from hydraulic division, comparison between the used methods and the proposal of a common optimized method; best practice model for tracking risks matrix; ensuring the traceability of information. **RESULTS:** The results of this research are linked to the optimization of the working way and to ensure the traceability, a model to inform all the involved persons in ECR about the process; realization of implementation and monitoring report which contain specific indicators for the entire project; developing and maintaining of a data base of researched indicators; defining of an optimized research way of the management system. **CONCLUSIONS:** The results of the present research fill a gap in the existing literature being the first research which proposed a concrete measure and model for product and process change management and the impact on analysis of performance increase applied in the automotive industry in Romania for a well-known global company.

Keywords: Engineering Change Request, Traceability, Improvement

THE OTHERS AND SELF-REPRESENTATIONS AND HOW TO QUESTION PROMINENT IMAGES OF GYPSY MINORITIES- ME SOM ROM

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Background: Roma / Gypsies a European nation with roots in India. The Indian origin and affiliation of the Roma are most evidently proven by linguistic arguments, based on the language still spoken today, by a large number of members of this heterogeneous ethnic group. The Gypsy people preserve a rich cultural heritage and an identity, values and customs that states must take care of and protect. His influences, whether we like it or not, on universal culture in a multitude of arts have been, are and will

always be present, whether in music, painting, sculpture, literature, language, cinema ... The proposed historiographical approach aims to demonstrate and facilitate the critical analysis of Roma stereotypes reflected in different forms of cultural manifestation known in different languages as *imagology*. Ethnic imagery, especially the Roma one, in this context, analyzes the perception of the collective mentality, in relation to itself (self images) and to others (hetero-images), both spectant and spected. In the study of the ethnic imaginary, *imagology* operates with two types of methods: descriptive which involve a detailed presentation of the clichés that make up the image of the other - All gypsies are thieves - respectively analytical - and explanatory based on understanding the relationship between spectant and spected, related to historical reality and social of the other. In both cases, the interconnection of social, ethnic and "racial" differentiation, together with the status of illegitimacy, produced what might be called "forced ethnicity".

Keywords: Gypsy, difference, self-representations, stereotyp, ethnic

TERRITORIAL BASED INNOVATION ECOSYSTEM SETTING IN MOUNTAIN AREAS A COMPARATIVE STUDY: TRØNDELAG COUNTY, GABROVO MUNICIPALITY, NORTH-EAST REGION OF ROMANIA

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Background: The innovation paradigm is often seen as the prerogative of research and technological start-ups which to some point is correct. Nonetheless in order to be accomplished and to sustain overlapping of benefits at societal level, the innovation processes have to have its stream in the territory. The purpose of this paper is to investigate methods and models by which innovation can be generated at territorial level and will analyze interventions conducted in 3 different mountain areas: Trøndelag county (NO), Gabrovo municipality (BG) and the North-East Region of Romania. **Material and methods:** Identification and analysis of qualitative data focused on actors, experiences, policies and territorial factors that shape the research and innovation landscape in the mentioned territories in order to achieve a comprehensive map of the territorial milieu. The mapping process evolves around the identification of key societal stakeholders and responsible research and innovation practices. **Results:** The results provide guidance in establishing dynamic innovation ecosystems at different territorial levels by analyzing the overall factors that stimulate local based innovation in mountain areas. During the mapping in the participating territories a total of 52 actors and stakeholders have been mapped, 17 research and innovation related practices, 22 factors (risks and opportunities) have been identified in the 3 study territories and 52 policy documents of relevance to the research and innovation have been reviewed. **Conclusions:** A general conclusion from the mapping activities is that the overall concept of research and innovation is still unfamiliar to the stakeholders and policy makers in the mountain areas. The number of practices used to stimulate innovation, number and typology of stakeholders, their interaction and the means to facilitate common understanding toward goal achievement is not yet governed by a 'one size fits all' framework, nor by brokerage/advisory services meant to generate territorial buzz for innovation.

Keywords: responsible research, innovation, mountain area, territorial governance

MIHAI SIN. TECTONICA PROZEI SCURTE

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Background: Mihai Sin is one of the prose writers who can be included in the prose of daily life, in the immediate vicinity of Alexandru Papilian, Gabriela Adameşteanu or Radu Mareş. His destiny as a writer is far from having received the true "frame", even if he writes at a time favorable to Romanian literature, when many young talents are discovered, being encouraged by social and political conditions since 1989. He does not want to write about a certain social category, he does not fix a certain one category of heroes, but wants to achieve a moral universe, which is true Mihai Sin writes without complex. He tries to never summarize destinies, but only states and situations, because of this Mihai Sin's short prose fits into a realism of details, through the detailed description of social issues, thus building frescoes of a drifting society. **Material and methods:** The writer considers writing a necessity, maybe that's why it inspires so much confidence his stories. This lack of stylistic abundance brings Mihai Sin closer to Liviu Rebreanu. **Results:** That essential thing that is lost on the road, it cannot be recovered, because the opacity of the heroes is

"barely flashed by the glitter nostalgic of thought. The fatigue of the soul, its diminution, the shadow of vice and especially that emptiness where there was no light and no darkness had yet appeared ", are valid symptoms for the file of all sick animals stuck in the "confused reality". **Conclusions:** Mihai Sin is an authentic prose writer, a moralist with moderation. Cultivation of short prose was a concern of the writer, who understood that short prose means the need for topicality, of direct and immediate approach to the realities we live. At the same time, this literary genre represents an intermediate stage towards the novel.

Keywords: prose of daily life, an authentic prose writer, a moralist with moderation, the true, the novel

THE REMARKABLE PERSONALITIES OF THE RHÉDEY FAMILY AND THEIR IMPACT ON THE HISTORY OF TRANSYLVANIA

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Background: The present study highlights the remarkable personalities of the Rhedey Noble Family and their impact on the history of Transylvania. I presented on III. FRANCISC RHÉDEY Francis Rhédei III (Hungarian: Ferenc Rhédey) (b. 1610, Oradea - d. 1667, Hust, Maramureş County) was a prince of Transylvania, for a short time, between 1657-1658. He was the son of Captain Rhédey Ferenc, commander of the city of Oradea and Károlyi Kata, sister-in-law of Prince István Bethlen. As a sign of loyalty to Ferenc Rhédey III. , György Rákóczi I, the prince appointed the prefect of the Târnavelor region in 1637, and a few years later was elected a member of the Prince's Council. The rank received is also kept under the reign of II. György Rákóczi. His reign was devoid of notable political facts. With the financial contribution, left by will, the Reformed-Calvinist Church from Câmpia Turzii was built. His very short reign begins in a very turbulent period. He died in Hust in 1667. RHÉDEYI JÁNOS AND KORNIS MARGIT .Rhédey János is the son of Rhédey Pál, Rhédey Pál II, the brother of Prince Rhédey Ferenc's father, the prince's primary cousin. Rhédey Pál was the chief treasurer of Prince Bethlehem Gabor. On February 14, 1616, for the special services of the prince, he received as a donation the territory of Szentpeterszeg, Bihor County. RHÉDEY ZSIGMOND AND BARONESS WESSELENYI KATA. These personalities, husband and wife, represent the greatest supporters and patrons of the Reformed Church in Sângeorgiu de Pădure and at the same time the patrons of the Reformed Church in Transylvania. Wesselenyi Kata (1735-1788) of Hadad, Wesselenyi Kata is one of the greatest Transylvanian matrons of the eighteenth century. became one of the most important patrons of the Reformed Church. COUNT RHÉDEY LÁSZLÓ (1775-1835) and BAROANA INCZEDI ÁGNES (1788-1856) ,new era.

Keywords: Rhedey Ferenc III., Rhedey Janos, Rhedey Zsigmond, Wesselenyi Kata, Rhedey Laszlo

ÎNVĂȚĂMÂNTUL MUREȘEAN DIN PERIOADA REGIMULUI CEAUȘESCU REFLECTAT ÎN PRESA JUDEȚEANĂ

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Background: After the death of Gheorghe Gheorghiu-Dej, which occurred in March 1965, a new era began in Romanian communism. Shortly afterwards, Nicolae Ceausescu was elected the new General Secretary of the P.C.R. and head of state in 1967. National communism imposed by Nicolae Ceausescu brought changes regarding the foreign policy of our country, all actions accomplished towards this purpose, such as denouncing the Soviet invasion of Czechoslovakia in 1968 and the brief relaxation of internal repression helped the new communist leader in Bucharest to create a positive image in the country and in the European western countries, rapid economic growth, supported by large loans obtained from the western countries, could not be maintained and gradually decreased in intensity until austerity and internal repression were reached. Education, the main instrument in the creation of the "new man", played an important role in achieving the objectives of the Romanian Communist Party during the national-communism period in our country. Mureş education followed the trajectory imposed from Bucharest. In 1968 Romania had a new territorial organization. Instead of regions, administrative organization achieved following the Soviet model during the Dej regime, the counties appeared. In Mureş, Hungarian-Mures Autonomous Region appeared. The important means of propaganda during the Ceausescu regime was the county daily "Red Star". The articles of this newspaper were meant to present all the achievements of Mures communists, as well as the activity of the head of state and of the P.C.R. It was not neglected the

education to which generous spaces were allocated in the pages of the newspaper. The new school headquarters, laboratories and didactic activities were illustrated. The newspaper presented in articles information from the main events that took place in pre-university education and a university student from Mureş.

Keywords: Romanian Communist, the trajectory import, receptions in pioneer

THE CROSSING OF A MYTHICAL FRONTIER AND ITS DIFFERENT ILLUSTRATION IN TWO AMERICAN FILMS

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Background: The youngest of the arts, cinematography, manifested itself energetically and quickly gained the public's attention shortly after its emergence in the last years of XIXth century, its popularity reaching high levels at the beginning of the next century. As with other forms of art, topics such war and conflicts have long been in the attention of the filmmakers, as they found a rich source of inspiration in the historical past. As a result of that cinematography played a leading role towards shaping, more expressively views of the audience regarding various historical events from the past. This perception was strongly influenced also by the contemporary socio-political context in which the movies were produced. The Western genre, considered the quintessential American film genre, displayed a solid symbolic charge, becoming part of a North American mythology. As the Cold War intensifies, since early '50, many filmmakers rooted in this genre switched the artistically focus from the „ Wild" West to the southern border of USA, with incursions in Mexico. Now Mexico become more than a background for the events depicted in the movies, but also a vessel for transmitting political messages or social commentaries. This study analyzes two movies „ Rio Grande" (1950) , and „ Major Dundee"(1965) that share a similar plot, are set in the same historical context but the story is told involving other meanings.

Keywords: frontier, Mexico, western, conflict, cinema

POSTMODERNISMUL: DEFINIRI, PERIODIZĂRI, DELIMITĂRI CONCEPTUALE (STUDIUL INTRODUCŢIV DIN TEZA DE DOCTORAT)

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Background: Postmodernism is rather hard to be defined, this form of literature often follows as a subject among partisan debates and it has as many ` drawings` of telling what it is, as the theorists exist. The shifting from modernism to postmodernism stretches over the 20th Century when some historians think the century was divided in two parts: the modern and the postmodern, while other critics claim the fact that these two periods occurred in the same time fragment. The Postmodernism is crossing the barrier of everything that lies behind it. It is out of order, out of form, it can be described as a set of critical, strategic and rhetorical concepts. The censor, the certainty, the constancy and nevertheless, the hierarchy are replaced with dominant values, such as: fragmentation, freedom, with emphasis on self-reference and on subversion. The Postmodern Man does not seek to reach out for the mind depth or soul profoundness - like he did back in Modernism - where he was wide aware of `sliding`, the touch of the thinking process, and "this art advancement of descending into the ordinary, became now persuasive", but everything dissolves into a straightforward style, an ordinary human experience. If modernism reflected a desire of creation and shadows parts from the enlightenment - which in the end an ethical issue - Postmodernism is basically rooted in idealistic identities (also referred to as `metafiction`) and it is an experimental fiction situated far away from the older forms like fragmentation, alienation, consumerism and deconstruction.

Keywords: postmodernism, postmodernity, modernism, modernity, history

E. LOVINESCU. A SHORT MONOGRAPHY BY I. NEGOIȚESCU

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Background: In 1970 a short monography on E. Lovinescu is published, the reaffirmation of the forgotten image of the controversial critic is made under the critical and neutral intuition of I. Negoïțescu, who evaluates him honestly, faithfully evoking all stages of his life and career. Negoïțescu's oponents declare themselves appalled by the utilization exercise of some fragments from Lovinescu's creation without a contribution to the new image of the reviewer. What is certain is that from the vast material of critical creation and autobiographical writings, Negoïțescu successfully manages to sort out the essentials about his doctrinal ideas. The monography to the one who was undisputed master of the fourth Maiorescu's generation.

Keywords: E. Lovinescu, I. Negoïțescu, monography, criticism

TAXONOMY OF CATASTROPHAL RISKS

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Background: Taxonomy for 3 major risks which can generate catastrophic events: cyber risks, nuclear risks, and earthquake. Cyber risks have a negative impact on profit margins, capitalization, and the image of an organization. Once the taxonomy of cyber risks is completed, we will analyze models for assessing the damage caused by them as well as trends in user behavior towards cyber security. Companies have increasingly turned to cyber risk insurance to better manage cyber threats and any legal liability resulting from breaches of data usage rights. The risk of natural hazards is constantly increasing due to climate change and increasing population density. Therefore, understanding and mitigating the risks of natural hazards to nuclear power plants has become a key task for critical infrastructure systems (CIS). In particular, nuclear power plants exposed to multiple hazards, which are a combination of more than two natural hazards, can lead to severe results. The fundamental objective of nuclear safety regulation is to ensure that nuclear installations are operated in an acceptable and safe manner. However, compared to single hazard phenomena, the multiple simultaneous and successive hazards have not been studied relatively extensively due to their inherent complexity and limited data availability. In this paper, we analyze multiple hazards in terms of types of disaster combinations based on the analysis level, such as hazard, fragility, and risk assessment. The risk of natural hazards is constantly increasing due to climate change and increasing population density. Disasters cause significant damage to the natural environment that underlies human survival, but for most part we fail to explain the loss of services in the affected environment when it comes to accounting for disaster costs. Next, the paper investigates the damage and the population affected by natural disasters based on the percentile ranking and analyzes the impact on the economy, per capita and fiscal balance.

Keywords: Natural disaster, Cyber Risk, Nuclear Risk, Multi hazard

SOCIAL SCIENCES

TRANSYLVANIAN TEACHERS IN THE PUBLIC SCHOOLS OF MOLDAVIA (MID 19TH CENTURY)

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Background: At the beginning of the 19th century, The Romanian Principalities were engaged in a process of modernization of both the state and the society. The elites of Moldavia and Valachia realized that education could have a significant impact on the general progress and the synchronization with Western Culture. A network of public schools that were essentially meant to provide well-prepared personnel to the state apparatus, began to develop after the publication of the so-called Organic Regulation (1832). In this paper, I intend to discuss the contribution of the Transylvanian intellectuals who taught in the Moldavian schools. They educated the youth not only by transmitting scientific knowledge but also by developing national consciousness. Here are some notorious names such as Chr. Flechtenmacher, Şt. Micle, Şt. Emilian, Petre Suci. At the same time, A.T. Laurian had the mission to reorganize the public school system, while Simion Bărnuţiu had a notable influence over the college and university students. Also, the local milieu reacted to their expanding influence in the educational system. Hence, we shouldn't overlook that. For the investigation, I consulted the specific literature, the local press, and the legislation of those times. Unfortunately, I couldn't make use of the archival sources due to the fact that the National Archives of Iaşi are still closed.

Keywords: modernization, public education,, Transylvanian intellectuals

TRANSNISTRIA WITHIN EXTERNAL POLICY OF THE RUSSIAN FEDERATION (1989-2002)

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Background: As a successor of the Soviet Union and an actor directly involved in the Transdnestrian conflict, Russian Federation continued its strong influence over that region of the Republic of Moldova in what followed after the freezing of the armed hostilities. On the one side, Russia, for diplomatical reasons, pursued a policy of recognition of integrity and non-interfering in the affairs of the Republic of Moldova, while on the other side, offered a vital support to the separatist leaders in order to survive and consolidate their power in the controlled region. This Article provides an analysis of the „double standards” external policy of the Russian Federation over Transnistria, between 1989 and 2002, based on bilateral and multilateral international instruments containing different obligations that were not finally fulfilled.

Keywords: Russia, Transnistria, armed forces, negotiations, international obligations

O SCURTĂ ISTORIE A REGIMENTULUI GRĂNICERESC NĂSĂUDEAN

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Background: A brief presentation of the history of this regiment, with the difficulties existing at its establishment, with all the obstacles posed by the Saxons and Hungarians, wants to awaken among Romanians everywhere but especially those in the former border region, the desire to know in more detail the history of this regiment and of the Nasăud region. The article aims only to arouse interest, briefly presenting the main stages of the establishment of the border regiment, starting with the first stage of militarization that included 23 localities and ending with the last stage of militarization of Bărgăului Valley, when the total number of militarized communes reached 44. The establishment of the Romanian border regiments was an opportunity for the Romanians from the Năsăud region, to acquire certain rights that would take them out of the pathetic state in which they were. Once border guards and participating in military campaigns abroad, they came into contact with other populations, with a different culture,

learning new things that they put into practice at home. Also, these campaigns cultivated the idea of national identity and the struggle for the recognition of the Romanian nation and last but not least the desire to unite with the Romanians who lived in other territories, in a single state. The status of border guard showed the Romanians that when they fight together for an ideal, it is much easier to acquire. Thus, after the abolition of the military border, the former Nasaud border guards fought for the transformation of the former border land into an independent district. And they even succeeded in this, from 1861 to 1876, when the district was called the Năsăud District.

Keywords: border regiment, serfs, militarized region

THE APPROACH OF EUROPEAN INTEGRATION IN THE ROMANIAN BOOKS BEFORE AND AFTER 1989

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Background: The writings on European integration were influenced by the existence of the two ideologies that marked the evolution of the social and political context of Romania: totalitarianism and democracy. Thus, we can distinguish two distinct periods that influenced the approach of European integration in Romanian publications: the communist period, marked, in general, by the lack of texts on European construction and the second stage represented by the period after the fall of the communist regime in Romania, starting with 1990, when the orientation towards the European Community and its related areas began. In this endeavor, were analyzed the publications in Romanian language and taken into consideration the texts containing the historical perspective of European integration, completed or not by other multidisciplinary approaches. Thus, were identified a number of 110 books that respect the subject and perspective of the research. During the communist period, the writings on European integration were limited to an ideological and propagandistic approach, with a predominant nationalist perspective on economic and trade relations with the West or active participation in maintaining security and cooperation in Europe. With the collapse of the communist regime, the subject of European construction began to be approached and analyzed due to the intensification of relations between Romania and the European Union, reflected in the increased number of publications in the period 2001-2007. The writings from this period were determined by the need to inform the public and to be aware of the new political, economic, cultural, social reality promoted by the European Union and the premises of Romania's accession into EU. After accession, the research has been oriented towards sectoral areas of national interest: legal, economic, social and political.

Keywords: European integration, Romanian books, history of EU, democracy, communism

SOCIOLINGUISTIC ASPECTS IN THE PHONETIC ANALYSIS OF A SPOKEN DIALECT

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Background: The present paper will consider the motivation of the presence of sociolinguistic elements in the phonetic analysis of a speech/dialect/idiolect. The aim is to exemplify the varieties defined by Coșeriu of diatopic, diasexual, diachronic, diaphasic and diastratic. Thus, it will be emphasized that the origin, education, occupation, gender and age of the informants generate language-specific features. In addition, the communication situation affects (positively or negatively) the interaction of participants in the discussion, supporting or interrupting the naturalness of the speech. I intend to give the particular examples from the dialectal surveys carried out in the Bistrița Valley. These examples will argue the results of phonetic analyzes

Keywords: origin, gender, age, social status, communication situation

A. J. CRONIN'S THE CITADEL AND THE TERM HEART IN TRANSLATIONS

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Background: One of Cronin's most outstanding novels and a bestseller in its own right at the time of publication, *The Citadel* has been praised for its contribution to the foundation of NHS. The novel was a great success both in Europe, as well as across the Atlantic, and was soon translated into several languages. This paper aims to investigate the comparison between the original version of the book and five of the translations, three of which in Romanian and two in Hungarian. What will be laid under particular analysis in this paper, is a selection of phrases and idiomatic expressions containing the term *heart* and their translation versions.

Keywords: A. J. Cronin, The Citadel, translations, heart

THE DEPORTATION OF ETHNIC GERMANS IN THE USSR

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Background: Near the end of World War II, at the request of the Allied Control Commission (Soviet), about 70,000 Romanian citizens of German ethnicity were deported for several years to the USSR to perform forced labor in the Donbas coal mines. The Romanian state did not have the capacity to oppose the ruling and turned into an instrument at the hands of the Soviets, which was used to extort its own citizens. At the end of some difficult years, they return, in proportion of 80 percent, home, but they found a New World, from which they were, in the following years, cast out. Thus ended, after seven centuries of coexistence, the story of an ethnic community

Keywords: Germans, Romania, World War, Deportations from Romania, Soviet Union

CHALLENGES AND PITFALLS IN CONDUCTING DIALECTAL SURVEY IN THE AREA BÂRGĂULUI, BISTRIȚA NĂSĂUD COUNTY

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Background: Introduction: Bârgăului Valley in Bistrița-Năsăud County is considered a transition area, which falls within the Northeastern Transylvanian language. Dialectal survey is an effective method of collection of linguistic material, as it involves the interaction of the investigator with the subjects and direct recording of concrete information related to the evolution of a subject. The purpose of the study is to present the challenges and pitfalls encountered in developing surveys dialects developed in the Bârgăului area, Bistrița-Năsăud county. Materials and methods: In conducting the direct dialect survey in the field, I used the "spy" recording method. and I applied a questionnaire consisting of 186 questions. The linguistic material collected was saved on electronic support for the purpose of phonetic transcription, systematization, analysis and interpretation of phonetically, morphologically and lexically. Results: Currently, the conduct of a dialectal survey subjects the investigator to attempts at time type, technology progress etc. People are very busy, work in factories, and after finishing the program ends its field work and housework. Young people no longer have time available, because he plans and organizes each action. Development of social networks and online media tools, regardless of the age of the informants, there is a fear of not being popularized on the internet, either out of a desire to protect their identity and privacy, or from fear of not being judged by the community, due to the fact that they are not aware of the village traditions, not knowing how to answer some questions Conclusions: Technological advances have helped me as an investigator in recording, storing and processing information collected, but at the same time through the development of networks and media channels have contributed to the fear induction of popularization in the virtual environment.

Keywords: dialectal survey, Bârgăului Valley, subjects, linguistic, investigator

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În anul 1960,
am continuat să lucrez
cu direcția procesului de
secreție intracelulară, folosind în
particular succesiv ambii moduri de
abordare a problemei. Primul mod
folosesc exclusiv metoda fracționării celulare
și a fost dezvoltată în colaborare cu amintii
colégi Philip Stekevitz, Lewis Greene, Colvin
Friedman, David Sabau și Junaka Tashiro această
abordare a dus la caracterizarea granulelor de zimogen
și la descoperirea segregării produsilor de
secreție în spațiul cisternelor din rețeaua
endoplasmatică (RE). Cel de-al
doilea mod de abordare a
utilizat în principal
metodele de
radionucl



ZILELE IUMEST 2020

Asadar
este vorba de
experiente pe animale
într-un
contact cu societăți din pacific
culturii au avut loc cu colaborarea lui Lucien Caro și în
special a lui James Jamieson. Această serie de experiențe a dus
în bună parte la ideile actuale privind sinteza și procesarea
intracelulară a proteinelor pentru a fi utilizate în celule.
O prezentare critică de ansamblu a acestui mod de
abordare se găsește în *Essays in Biochemistry* editată
de Comitetul de Acordare a Premiului

