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BOOK OF ABSTRACTS

**21st International Conference
„Arad Academic Days“
May 20-22, 2011**



Romania
„Vasile Goldiș” Western University of Arad

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Friday, May 20th, 2011, 15.00 – 18.00

Saturday, May 21st, 2011, 9.00 – 13.00

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Section II – Interdisciplinarity in Medical Sciences

Friday, May 20th, 2011, 15.00 – 18.00

Saturday, May 21st, 2011, 9.00 – 13.00

“Vasile Goldiș” University Campus, No. 86, Liviu Rebreanu Str., Hall No. B5

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Section III – Complementarity between Esthetics and Prevention in Dental Medicine

Friday, May 20th, 2011, 15.00 – 18.00

Saturday, May 21st, 2011, 9.00 – 13.00

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Section IV – Interdisciplinary Research for Young Researchers and Students

Friday, May 20th, 2011, 15.00 – 18.00

Saturday, May 21st, 2011, 9.00 – 13.00

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SECTION I – PRECLINICAL AND PHARMACEUTICAL RESEARCH IN MEDICINE

ORAL PRESENTATIONS

The main considerations regarding the importance and range of uses of arilazopyrimidines

*Dorina Ardelean¹, Florica Nicolescu², Corina Toderescu¹,
Svetlana Trifunescu¹*

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

The synthesis of arilazopyrimidines is accomplished most often either by coupling a pyrimidine with a diazonium salt coming from an aromatic amine, or by coupling a diazopyrimidine with an phenol or with an aromatic amine. There are also a lot of indirects methods of synthesis and primary synthesis. The main purpose of the undertaken research was to obtain the characteristics of some arilazopyrimidines. These compounds show a different interest under the structural aspect, because the tautomeric phenomenon is very complex. The compounds that were taken into account were done with barbituric acid and some substituted pyrimidines. The IR spectra of the derivatives obtained from the barbituric acid presents a group of bands from the region 3260-3080 cm, due to the valence of vibrations of NH groups in both from the pyrimidines skeleton and the hydrozonic group. In order to obtain additional arguments about the adoption of azo or hydrazo structure, of these compounds, we undertook a complex study HyperChem5.

Keywords: arilazopyrimidines synthesis, the barbituric acid, IR spectra.

Pharmaceutical and cosmetic formulation of Silymarin and Silybin Marianum Seeds oil

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Cosmeceuticals are used for nourishing and improving the appearance of the skin and also documented as effective agents for treating various dermatologic conditions. Cosmeceutical preparations from herbal origin are most popular among consumers because these agents are mostly nontoxic and possess strong

antioxidant activity. Because oxidative stress is one of the major mechanism for skin ageing and dermatologic conditions, phytochemicals with proven antioxidant activity, such as silybinin, could be useful for treating many dermatologic conditions as well as skin ageing. Our aim was to develop creams containing 5 % of Silybin marianum seeds oil for different purposes. Six different compositions were prepared, and investigated their allergic effect. It can be found that all cream compositions protect from allergic symptoms even from cell damage.

Keywords: Silymarin, cosmeceuticals.

Acknowledgement

This work was financially supported by the grant HURO/0901/058/2.2.2.

Porous pellets – a possibility to obtain a modify release for metoprolol salts

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Introduction. This study has the objective to obtain porous pellets consisting in a mix of HPMC (hydroxypropylmethylcellulose) and xanthan gum or alginates salts or carrageens salts, and calcium salts soluble in water as gelling agent.

Materials and Methods. This pellets after the removal of the calcium ions via extraction with water was evaluated by loading techniques to incorporate metoprolol salts by two techniques: fluid bed and immersing in a drug solutions.

Results and Discussions. The pellets obtained by extrusion and spheronisation were characterized from residual content in calcium ions, friability and drug loading. The pellets obtained can be used as carriers from metoprolol salts (succinates and tartrate).

Conclusions. The drug loading studies have shown that immersing the pellets in a drug solution are able to deposit metoprolol salts inside. Using fluidized bed coating no drug was found inside the porous pellets.

Keywords: alginates salts, carrageens salts, and calcium salts soluble in water gelling agent, extrusion, hidroxypropylmethylcellulose, metoprolol salts (succinates and tartrate), spheronisation, xanthan gum.

Maceration of Defatted Milk Thistle (*Silybum Marianum*) Seeds

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A simple process of isolation of the hepatoprotective agent silymarin is given. The process is cheap and simple resulting good quality product. The maceration of defatted Milk Thistle seeds was done using acetonitrile in a mechanically stirred tank reactor. The maceration was done three times using fresh solvent. After filtration the three acetonitrile phases were combined and evaporated in a rotavap. The crude product was purified with stirring the dry silymarin with dichloromethane at a temperature of 5 °C. Filtration followed by drying in an oven at about 10 Hgmm under 40 °C for overnight resulted the final product of silymarin.

Keywords: maceration, *Silybum Marianum*.

Acknowledgement

This work was financially supported by the grant HURO/0901/058/2.2.2.

Nanopharmaceutical formulation of drugs

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In the last decades we have witnessed an enormous growth in the field of nanotechnology and nanomedicine. Nano-sized therapeutics and drug delivery systems offer special opportunities for the treatment of diseases and to overcome biological barriers. Nanopharmaceutics with targeting capabilities are able to deliver drugs specifically to target molecules and reduce side effects. Several nanopharmaceuticals and delivery systems have been

developed such as liposomes, antibodies and their conjugates, viral and non-viral vectors for gene and oligonucleotid delivery, nanoparticles, polimer conjugates and cyclodextrin derivatives. The presentation provides an overview of the principles of nanopharmaceutical formulations and applications.

Keywords: nanopharmaceuticals

Acknowledgement

This work was financially supported by the grant HURO/0901/058/2.2.2.

Host-guest complexation of silymarin and cyclodextrin derivatives

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Silymarin formulations with high bioavailability could offer new possibilities for the treatment of acute hepatotoxicity. The bioavailability of drugs is often limited by their poor solubility and absorption. Silymarin, the dry extract of *Silybum Marianum*, is water insoluble therefore we applied the cyclodextrin nano-encapsulation for the improvement of silymarin solubility. Hydroxypropyl- β -cyclodextrin (HPBCD), randomly methylated β -cyclodextrin (RAMEB) and 2,6-di-O-methyl β -cyclodextrin (DIMEB) were used as host molecules. Different silymarin-cyclodextrin mass ratios were prepared from 1:5 to 1:20 and we found that each cyclodextrin was able to increase the water solubility of silymarin. The absorption properties of these promising products can be further tested.

Keywords: silymarin, bioavailability.

Acknowledgement

This work was financially supported by the grant HURO/0901/058/2.2.2.

MS/MS Study of Constituents of Silymarin

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Because of the extensive medical application of the milk thistle plant, *Silybum marianum*, there is a strong need for the development of highly sensitive and effective analytical method for the characterization of its major components. Liquid chromatography–mass spectrometry combined with soft ionization methods, e.g. electrospray ionization (ESI), can satisfy these requirements. Furthermore, if tandem MS (MS/MS) is applied structural information can also be obtained and the efficient differentiation between isomeric flavonolignans can be achieved. By HPLC-MS measurements eleven silymarin constituents were detected as isomers at $m/z=481$. Selecting m/z 481 as the precursor ion for MS/MS experiments the comparison of the fragment ions and their relative abundances serves as an effective tool for the identification of the different flavonolignans in silymarin. To see more exactly the similarities and differences between the MS/MS spectra of the eleven silymarin constituents detected as isomers at $m/z=481$ the spectral similarity of each 55 component pairs were determined. Our goal was also to found some simple criteria for the distinguishing of the main silymarin components. In further series of experiments the collision energy/voltage dependence of the survival yield (SY) was studied for the main silymarin components.

Keywords: silymarin, MS spectra.

Acknowledgement

This work was financially supported by the grant HURO/0901/058/2.2.2.

HPLC Separation of Silymarin

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Silymarin, extracted from the milk thistle plant, *Silybum marianum*, has been successfully applied for the treatment of various liver diseases. Its anti-tumor promoting activity and many other pharmacological activities have also been

reported. Due to the extensive medical applications there is a strong need for the development of highly sensitive and effective analytical method for the characterization of silymarin which is a mixture of flavonolignans. In our work high performance liquid chromatography/tandem mass spectrometry (HPLC–MS/MS) method was developed for the determination of the major bioactive flavonolignans in silymarin. Eight active components of silymarin and an unknown compound were completely separated. Furthermore, three more components were detected and partly separated, presumably two silybin stereoisomers and one isosilybin stereoisomer.

Keywords: HPLC separation, silymarin

Acknowledgement

This work was financially supported by the grant HURO/0901/058/2.2.2.

Preparation and Characterization of High-spin Polymers

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Our main objective is the synthesis and characterization of special classes of polymers namely high-spin polymers. Since this system is based on conducting polymers therefore the design and preparation of conducting polymers having narrow molecular weight and novel structure are vital for our research. The polymers prepared are modified by the introduction of different types of functional groups as well as by the attachment of proper polymer side-chains to the main conducting chain in order to alter solubility and further physical properties. A thorough characterization follows the synthesis. Using the modified polymers the preparation of well defined nanostructures is carried out both in solid and solution state.

Keywords: high-spin polymers, preparation.

Acknowledgement

This work was financially supported by the grant K-72524 given by OTKA (National Found for Scientific Research Development, Hungary).

<http://www.jmedar.ro/book-of-abstracts>

Extractive Defatting of Silybum Marianum Seeds

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The first step of the isolation of the pharmacologically active „silymarin” fraction from the seeds of Silybum marianum (milk thistle) is the removal of the oily compounds that makes up almost 30 percent by weight of the seeds. The oil fraction is of great importance; it is used in cosmetics helping skin reparation. There are two general methods for the extraction of oils: the first one involves the Soxhlet type extraction with the proper solvent, while the second method uses a surface active material, such as tween type copolymers. To avoid contamination with synthetic compounds the Soxhlet type solid-liquid extraction method was chosen. The first step of the extraction procedure was the grinding of the seeds. A proper grinding method was developed, the effect of grinding time and apparatus on particle size was investigated. A large scale Soxhlet extractor was built and the apparatus was optimized to perform the best extraction. The effect of solvent and extraction time on the efficiency of the extraction was studied. The extracted oily phase was dried, measured and was made ready for further processing.

Keywords: extractive defatting, silymarin, Silybum Marianum Seeds.

Acknowledgement

This work was financially supported by the grant HURO/0901/058/2.2.2.

New diazoethers with potential applications in medical laser domain (area)

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2 "Vasile Goldis" Western University of Arad, Romania

Study objectives: The main purpose of the study was the synthesis of some new diazoethers which may have an extended molecular orbital, generating an intense bathochrome displacement of the maximum absorption in UV-Vis. This property is useful in medicine, in LASER applications. We have also focused in choosing the

optimal pH domain for the coupling reaction, in choosing the coupling components (sodium salts of some barbiturate derivatives), but also to avoid decomposing reactions or self coupling. Results: The coupling reaction yields were between 60-80%. The yield after purification for coupling 1-naphthylamine diazonium salt with N1-sodium phenylbarbiturate was about 81%. The diazoether's new structure was verified using UV-Vis and FT-IR.

Keywords: diazoethers, LASER applications, the coupling reaction.

The Principles of Isolation, Determination and Dosage of Anthocyanic Pigments from the Fruits of Sambucus Nigra

Corina Toderescu, Dorina Ardelean, Svetlana Trifunsi

“Vasile Goldis” Western University of Arad, Romania

There are many natural compounds in plants, among which anthocyanins are the most important. They have a very remarkable biochemical and physiological role: they take part in many metabolic processes, they form oxidoreducing systems, give taste, aroma and color to food, flowers and fruit. They are also top components in medicines and treatment of diseases. Obtaining chemically synthesized anthocyanins is quite complicated, so the extraction from herbs is preferred. Fruits of Sambucus Nigra have relatively high content of anthocyanins and therefore were chosen to serve as raw material for extraction. In the present study was aimed at extracting anthocyanins, using 90% methanol and 10% hydrochloric acid, given the fact that anthocyanins are polar compounds, due to the numerous hydroxyl groups. Anthocyanins are extracted as hydrochloride, a form in which they are soluble and stable. Because anthocyanins are sensitive to high temperature, oxidation is slight, their processing must be performed at temperatures below 80°C. UV-Vis spectroscopy allowed determination of quantitative Sambucus Nigra anthocyanins extracted from samples analyzed by measuring extinction at 420 nm and 520 nm, at two different pH values namely 0.6 and 3.5 knowing the equations of calibration curves at the anthocyanins two pH's. By comparing the IR spectrum recorded from samples extracted to spectral data from literature, the presence of anthocyanins was revealed.

Keywords: antioxidant activity, anthocyanins, methanol extract, Sambucus Nigra.

Electromyography radioimagnostic features to patients with degenerative diseases

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Spondylosis is a degenerative disease of the spine. This is "assigned" the entire string column from top to bottom, most commonly for lumbar and cervical region. Spondylolisthesis consists of calcium deposits on the edges of the disc or on shelves around the joints. Surface electromyography (S-EMG) is a computerized electrophysiological investigation method that can measure the electrical potential of skeletal muscle. It uses specific protocols electromiografia surface (S-EMG) obiectivarii allowing neuromuscular disorders, neuromuscular rehabilitation can be used in the S-EMG biofeedback in sports, ergonomics, neurology and not least in orthopedics- traumatology. Radioimagnostic is represented by radiography, radiography of the face, computed tomography (advantage over conventional radiography especially in terms of very early detection of lesions), Osteoarticular scintigraphy (using Tc-coupled petechnetat $^{99m}\text{TcO}_4$ or metilendiphosphanat- $^{99m}\text{TcMDP}$).

Keywords: electromiography, radio-imagistics, degenerative diseases.

Comparative studies on the accumulation of heavy metals in propolis samples from Arad County and their use in pharmaceutical preparations

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Propolis has been referred to in medical treatises from Arab, Greek and Roman time's right up to the late nineteenth century - being cited as a natural aid for a variety of health problems, including respiratory and joint problems as well as infections and skin diseases. Use of propolis by humans has a long history, predated only by the discovery of honey. Use of products containing propolis has resulted in extensive dermal contact and it is now increasingly being used a dietary supplement. Unlike many "natural" remedies, there is a substantive database on the biological activity and toxicity of propolis

indicating it may have many antibiotic, antifungal, antiviral and antitumor properties, among other attributes. The purpose of this study was to determine the level of heavy metal loading of propolis samples. The selected and distribution of heavy metal level in these propolis samples, have been determined by a method which is called atomic absorption spectrometer (AAS). Results have showed that there were amounts of heavy metals above the admitted limit by the OMS. These studies have shown that the values obtained from tests carried out are in the so-called safe area, compared to values transmitted by the Food Codex, even if they were found quite high values. To achieve the so-called chemical characterization were carried out determinations of heavy metals levels of propolis samples from two different areas. Propolis extracts were made by a standard method. Were used in each trial one gram of propolis. The sample was crushed and extracted with 50 ml of 70% ethanol at room temperature, twice after 24 hours. At the end the alcoholic extract was evaporated under vacuum at 50°C to the rank of dry extract. Measurements performed on the ethanolic extracts of propolis, reveals that the samples were brought to be tested, was found a high content of nickel (Ni), copper (Cu), manganese (Mn), iron (Fe), cadmium (Cd) and magnesium (Mg). Because propolis samples that were analyzed shows the levels of heavy metals are within the limits allowed by the Food Codex, they can be recovered and even used in pharmaceutical formulations.

Keywords: heavy metals, propolis, contamination.

Relationship between inflammatory markers and lipid metabolism in the type 2 diabetic patients

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Background. Fibrinogen and C reactive protein are the markers for inflammation. The main objective of this study was to determine the fibrinogen level and CRP levels in type 2 diabetic patients.

Materials and methods. The subjects, men, aged 40 – 60 years with type 2 diabetes were recruited for the study. There were determined the following: fasting glycemia, total cholesterol, HDL cholesterol, LDL cholesterol, triglycerides, fibrinogen, C reactive protein (CRP). The control cohort was formed from 20 patients, age 40 - 60, without obesity and diabetes.

Results. Fibrinogen and C reactive protein levels were higher among diabetic subjects ($502 \pm 90,6$ mg/dl, $10,4 \pm 4,6$ mg/dl) as compared controls ($272 \pm 12,8$ mg/dl,

1,5±1,1 mg/dl). The changes in the lipids metabolic appear especially in type II diabetes, uncontrolled metabolically (cholesterol 5.3±1.69mmol/l vs 4.76±0.66mmol/l, HDL 0.81±0.36mmol/l vs. 1.19±0.28mmol/l, LDL3.68±0.93mmol/l vs. 2.66±0.46mmol/l, tryglicerides 1.74±0.86mmol/l vs. 1.1±0.31mmol/l). Fibrinogen and C reactive protein is correlation with any component of the lipid profile. *Conclusion.* The increased fibrinogen and C reactive protein were strongly related to the diabetes and cardiovascular complications. The fibrinogen and C reactive protein may be used as an inflammatory markers and possible indicator of type 2 diabetes complication.

Keywords: fibrinogen, C reactive protein, diabetes, inflammation

Interactions between grapefruit juice and prescription drugs

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Grapefruit compounds can alter drug pharmacokinetics by different mechanism. Two major furanocoumarins were found in the grapefruit juice: **bergamottin** and **DHBG 6',7'-dihydroxibergamottin**. Furanocoumarin derivatives are also found in herbal medicines from the families Umbelliferae, Rutaceae and Leguminosae. The pharmacokinetics of clinically used drugs is altered by natural furanocoumarins from grapefruit juice as well as from several herbal medicines. It seems that furanocoumarin derivatives from grapefruit juice or whole fruit segments can inhibit/inactivate several cytochrome P 450 isoenzymes 3A 4;2B 6 and 3A 5. Cytochrome P 450 enzymes are involved in the oxidation of a wide variety of drugs,carcinogens,steriods,pesticides,and other chemicals. Cytochrome P450 enzymes catalyze a variety of oxidation and some reduction reactions. A general chemical mechanism can explain carbon hydroxylation, heteroatom oxygenation and dealkylation, epoxidation, desaturation, heme destruction, and other reactions. The cytochrome P 450s 3 A 4 and P 3 A 5 are the major cytochrome isoenzymes from the P 450's in human liver and intestine and are responsible for the metabolism of approximately 60% of clinical relevant drugs. P 450 3A5 is the primary member of the P 450 family expressed outside the liver and intestine;it has been found in the adrenal gland,prostate,and the kidney. Both P 450s 2B 6 and 3A 5 play an important role in the metabolism of endobiotics and xenobiotics including clinical drugs used in cancer therapy,hormone therapy,inhibition of HIV

protease, depression, and calcium channel blockers. Irreversible inactivation of intestinal cytochrome P450 (CYP) 3A4 is produced by grapefruit juice or by whole fresh fruit segments. Another mechanism of interaction is possibly through the P-glycoprotein (Pgp) that is localized in the apical brush border of the enterocytes. Pgp transports lipophilic molecules out of the enterocyte back into the intestinal lumen. Drugs that possess lipophilic properties are either metabolised by cytochrome P450 (CYP) 3A4 or removed into the intestine by the Pgp transporter. Both the Pgp and cytochrome P 450 (CYP) 3A4 may act synergistically as a barrier to many orally administered drugs. Therefore their inhibition (both or alone) can markedly increase the bioavailability of a drug. Numerous medications used in the prevention or treatment of coronary artery disease and its complications (e.g. HMG-CoA reductase inhibitors; dihydropyridines, antidiabetic agent repaglinide; clopidrogel; antiarrhythmic agents, etc.) have been observed or are predicted to interact with grapefruit juice. If a drug has low inherent oral bioavailability from presystemic metabolism by cytochrome P450 3A4 or efflux transport by P-gp and the potential to produce serious overdose toxicity, it appears mandatory to avoid grapefruit juice entirely during pharmacotherapy. The result is difficult to predict, despite the fact that altered drug response varies among individuals,and therefore,the prevention of toxicity is guaranteed by avoiding the combination.For the cause that the elderly are often prescribed medications and they frequently consume grapefruit juice,they are at particular at risk.

Keywords: grapefruit, drugs, cytochrome P450.

Epidemiological considerations on alcohol consumption

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The excess of alcohol consumption is the fourth problem of public health in the OMS activity, requiring activities of screening, monitoring and control! An important role in these activities belongs to the Family Medicine. The study was made on a group of 2894 patients from the urban environment at the age of 30 or older (1431 men and 1463 women). Population has been questioned in connection with the consumption of alcoholic drinks, evaluated in one average week in U.I. (drink). It was established a prevalence of 7.82% of drinkers who consume excessive alcohol (≥ 21 u.i alcohol) per week, the consumption is significantly higher for men than for

women (5:1). A percentage of 11,25% declaring that they do not consume alcohol (0 ui alcohol) and 38.88% with low consumption of alcohol (1-7 ui alcohol). The influence of excessive alcohol consumption is translated like the increasing prevalence of underweight people and overweight people from the general population of the group (7,06:12,62 and 21,87:38,98%). The arterial hypertension register prevalence significantly higher in heavy users of alcohol 38.86% from 32,04 at the general consumers from the group and from the evolution from stage II and III increasing percentage. The cholesterol does not suffer significant changes but hypertriglyceridemia is almost double as prevalence of excess alcohol consumers (28,15:15,031). Smoker's prevalence is 2.5 times higher in consumers of alcohol in excess not like general population. The conclusion of the the people who drink alcohol in excess associates the increase of cardiovascular risk for increased prevalence of the smokers, arterial hypertension, hypertriglyceride and obesity, unknown early detection, monitoring and specific control measures in Family Medicine.

Keywords: public health, alcohol, arterial hypertension

Hyperalgesia - An Overview

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Hyperalgesia, as a symptom, is part of the intricate defense mechanism of the human body. Still, a prolonged intense painful sensation that serves no purpose in the alarm system becomes an entity that needs to be addressed and taken seriously. From the three types of hyperalgesia, two are more important: primary hyperalgesia that occurs at the site of the injury due to the sensitization of nerve endings and secondary hyperalgesia that takes place due to alterations in the processing of sensory information in the central nervous system. In hyperalgesia, at a molecular basis, a major role is played by the inflammatory mediators that constitute the “inflammatory soup” that sensitize the nerve endings. Recently, it has been demonstrated the involvement of polymorphonuclear in hyperalgesia through leukotriene B₄, as well as the role of sympathetic postganglionic neurons. Opioid-induced hyperalgesia is a type of hyperalgesia that occurs after administration of opioid medication or drugs. Changes mediated via the NMDA-receptor in the dorsal horn occur after a long exposure to opioid drugs resulting in hyperalgesia. We intended to put together an overview of the most recent data on

hyperalgesia, emphasizing the following aspects: hyperalgesia – symptom and/or disease, molecular bases of hyperalgesia, types, pathways, cells, mediators and receptors involved, the experience of hyperalgesia according to individual factors such as age, gender, anxiety, the role played by the hippocampus in the exaggerated persistent painful sensation.

Keywords: hyperalgesia, nociception, sensitization, molecular, opioid, placebo, inflammation

Interrelations of drying heat and survival of different fungal spores within the tablets formulation

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Introduction. The level of temperature plays an important role in the survival of the microorganisms, the different species of molds must grow and develop at any temperature their environment is. However, high temperature for a certain period will cause the death of microorganisms.

Material and Methods. In this study the objective is to investigate the interrelations of drying heat (55 °C for 30 minutes) used in tablets manufacture on the survival of different fungal spores (*Aspergillus flavus* and *Penicillium* spp.) at different contamination levels (102, 104 and 106) (spores/g) within the prepared tablets. *Results and Discussions.* The results showed that the drying heat caused the inactivation of about 32% of *Aspergillus flavus* spores and 36.6 % of *Penicillium* spp. spores within the granules.

Conclusions. In addition, the level of inactivation decreases with increasing the contamination level, especially with 106 (spores/g) which may be related to the possibility of mutation that leads to enhance the resistance toward heat.

Keywords: tablets manufacture; drying heat; fungal spores survival

Studies concerning the variability of plant productivity characters in a collection of local landraces of bell pepper

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Exploring the local populations in different crop species allows finding valuable gene resources for different objectives for breeding. The study aimed to evaluate a collection of local landraces of bell pepper, originating from western Romania concerning the main traits that compose the production ability. The collection subjected to study presents a variability that can be used in pepper breeding programs for fruit weight and number of fruit per plant. Higher yields per plant are produced based on a large number of fruit in Satchinez, Siria, Tomnatic, Vinga landraces. In Temerești I landraces production per plant is based on fruit size.

Keywords: bell pepper, local landraces, variability, components traits of plant productivity.

The effect of Eryngium Campestre tincture on turpentine oil-induced acute inflammation model in rats

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Aim. Effect of the 20% tincture of the indigenous Eryngium campestre (Apiaceae) was studied by a turpentine-oil induced experimental inflammation in rats. *Material and Methods.* Experiments were carried out on 4 groups of 8 adult male Wistar rats (150-170g b.w.). Turpentine oil was administrated to all animals (i.m., 6 mL/Kg b.w.) in order to induce the inflammation. After 15 minutes, animals were treated i.p. as follows: group 1 - 20% E. campestre tincture (40 mg plant material/Kg b.w.) diluted in sterile saline, group 2 - 20% E. campestre tincture (200mg/Kg b.w.) diluted in sterile saline, group 3 (control) - sterile saline and group 4 - diclofenac (20 mg/Kg b.w.). Effects were quantified by measuring serum nitrites and nitrates (Griess assay), total oxidative status (TOS), total antioxidant activity/response (TAR)

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and index of oxidative status (IOS). An in vitro phagocytosis test was also employed in order to determine the phagocytosis index (PI) and phagocytosis activity (PA). Total leukocytes and differential leukocytes were counted.

Results and discussions. E. campestre tincture decreased significantly the total leukocytes count compared to control.

Keywords: Eryngium, leukocytes, NO, oxidative stress, phagocytosis

Problems associated with the TMJ

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There are myriad problems associated with the TMJ, and in many cases there is disagreement over how these problems should be treated. Many patients come with a complaint of pain in the region of the TMJ. If radiographic studies seem to be any pain on palpation of the area, one might consider the possibility of referred pain. Many patients complain of a popping, clicking, or grinding in the TMJ yet have no other symptoms, such as pain. The popping or clicking noise may occur when the disc is pulled too far forward in the opening movement. Sometimes by palpating the joint as the popping occurs, you can feel the jumping movement of the condyle as the disc pops forward. If it only happens on one side, you can frequently see the movement by standing in front of patients as they open their mouths and seeing whether it shifts to one side as it opens and then moves back to the midline. The cause of TMJ sounds may be considered a type of disc derangement, but there we will discuss additional problems. In constant anterior displacement of the disc, there possibly may be permanent damage to the components of the disc. A person may open the mouth too wide and not be able to close it again or may close it with a popping back into position. This happens when the condyle glides too far forward and moves too far anterior to the height of the articular eminence. In general, there are several reasons for this condition, which is called subluxation. Many people grind their teeth. This is referred to as bruxism. Most of the time this is done during sleep, although some of the time it occurs during waking hours, so the TMJ becomes very tired and sore.

Keywords: TMJ

POSTER PRESENTATIONS

The role of lipoproteins in the lipidic transportation

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In postprandial period, over 95% of plasma lipids are in the form of lipoproteins. Lipoproteins are spherical particles that contain a hydrophobic core composed of triglycerides and cholesterol ester, and a hydrophilic shell composed of proteins (apoproteine), phospholipids and cholesterol nonesterified. Lipoproteins have been classified into five groups according to their density and electrophoretic migration - chylomicrons, VLDL, IDL, LDL, HDL. -chylomicrons, electrophoretics do not migrate. Chylomicrons are made up to 90% of triglycerides, but also contain phospholipids, cholesterol and apoproteine. They have the lowest density. -VLDL (very low density lipoprotein), or prebeta band. The VLDL lipoprotein's particles are about 90% fat, of which most (60%) are endogenous triglycerides and apoproteines -IDL (intermediate density lipoprotein), which causes the increased beta band range to electrophoresis. The IDL lipoprotein particles have a very small molecular weight, formed by hydrolysis of triglycerides in VLDL, so that the concentration of cholesterol and phospholipids is relatively increased in comparison to that of triglycerides. -LDL (low density lipoprotein), or beta band. The LDL lipoprotein is up to 70-80% of the lipid complex which is about 50% esterified linoleic acid cholesterol. -HDL (high density lipoprotein), or alpha band. The HDL lipoprotein containing 50% fat and 40-50% protein. Hyperlipidemias can be classified in primary hyperlipidemias and secondary hyperlipidemias. Depending on the growth of lipoprotein fractions, primary hyperlipidemia be classified in: HLP I, HLP II a, HLP IIB, HLP III, HLP IV, HLP V. The secondary hyperlipidemia is another secondary disease like diabetes, chronic alcoholism, atherosclerosis and obesity.

Keywords: lipoproteins, phospholipids, cholesterol.

Statin therapy involving a group of patients with dyslipidemia - epidemiological aspects

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Introduction: Cardiovascular disease is now, both in Romania and abroad, the main cause of mortality. Statins (inhibitors of 3 hydroxy-3-methyl-glutaryl coenzyme A reductase - HMG CoA reductase) are the lipid lowering medication most effectively and therefore the most widely used to reduce cardiovascular morbidity and mortality. The aim of this study was to analyze the epidemiological characteristics of statin therapy in a group of patients hospitalized with dyslipidemia diagnosis, during one year period. Material and methods: For this purpose we performed a retrospective analysis of data from the patients' medical charts diagnosed with dyslipidemia and hospitalized for at least 24 hours in the Cardiology Department II in Arad County Hospital, in 2008. Results: Of the 1811 patients hospitalized a total number of 758 (41.86%) followed statin therapy. Most of them were female (51.58%) and from urban areas (50.53%), the largest number of patients being treated with statins in November (12.53%) and February (11.35%). Most patients received lipid-lowering therapy with simvastatin 40 mg (21.24%), followed by those who were treated with atorvastatin (sortis) 40 mg (10.94%). After using the Pearson correlation coefficient we have found a strong positive correlation between the elevated cholesterol and triglycerides levels and between the elevated cholesterol and blood glucose levels ($r_1 = 0.853$ and respectively $r_2 = 0.868$) in these patients. In addition, a weak positive correlation between elevated cholesterol and liver ultrasound changes ($r_3 = 0.564$) was revealed. The largest number of patients belonged to the 48-57 years old age group (41.42%); their hospitalization lasted between 7 and 14 days (59.76%). Conclusions: Almost half of the patients admitted during this period received statin therapy; most of them were women, were from urban areas and belong to the middle-age group. The most widely used lipid-lowering therapy was that with simvastatin and atorvastatin at a dose of 40 mg. All cases had a positive evolution and there was no recorded lethality among them.

Keywords: statin, therapy, epidemiology, dyslipidaemia

Obesity therapy – news and perspectives

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Obesity is the most frequent metabolic disease and it is associated with severe comorbidities (hypertension, dyslipidemia, insulin resistance). Its treatment includes

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lifestyle modifications (a program of appropriate diet, physical exercise and behavior therapy), anti-obesity drugs and bariatric surgery. The first line therapy for obesity and its comorbidities is consisting in life style changes with regard to diet and physical activities. The drug therapy is especially necessary in those patients exposed to comorbidities. The anti-obesity medication include: drugs that decrease appetite through central action (e.g. sibutramine, feofluramine), drugs that exert their effects through peripheral action and drugs that increase the body energy expenditure (ephedrine, caffeine). Surgical treatment (bariatric surgery) is the only therapeutic way which is associate with weight loss clinically significant at patients with morbid obesity. Also, there are several new anti-obesity agents under investigation: ghrelin receptor antagonists, neuropeptide Y (NPY) receptor and melanin-concentrating hormone (MCH)-1antagonists and respectively beta 3 adrenergic receptor agonists.

Keywords: obesity, new treatments, therapeutical options.

Positioning and differentiation – tools in quality insurance on the romanian anti-diabetic drugs market

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The success of the marketing activity is based upon the right positioning of a product on the market and implicitly on its differentiation versus competing products. As diabetes mellitus is a pathology with bad economic, psychological, social and medical implications on the population and with continuously growing prevalence, providing it a proper drug based treatment becomes an important aspect related to diabetic patient improved life quality and life expectancy. At present, several classes of oral anti-diabetic drugs (OADs) and insulins are approved for the Romanian market, several molecules and numerous original or generic preparations are use in the care of this disease. For the specific purpose of this paper, oral medication was divided into three classes in relation with their action mechanism,

while insulins were included in only one category. In our paper, we allotted a score for each brand, dependent upon product price and attractivity. Following the survey and analysis of results, we could find that no anti-diabetic drug is perceived as having a higher cost than attractivity (dial I). On the Romanian market some “stars” among OADs are registered, their price and attractivity is high (dial II: NovoNorm (repaglinide), Glucobay (acarbose), Actos (pioglitazone), Avandia (rosiglitazone), Lantus (insulin glargine) etc.). Dials III (low price and attractivity) – Humalog (insulin lispro), NovoRapid (insulin aspartate) - and IV (high attractivity, low price) – Siofor (metformin), Amaryl (glimepiride), Diaprel (gliclazide), NovoMix (insulin aspartate + NPH) etc.- include most of the anti-diabetic drugs.

Keywords: positioning, differentiation, anti-diabetic drugs, diabetes mellitus

The role of efficient communication between the pharmacist and the patient in order to prevent the self-medication phenomenon

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The phenomenon of self-medication means taking drugs on his/ her own or taking medicines that is not according to the medical prescription or to pharmacist. Serious consequences occur, especially when the patient under a second medical treatment, because of the possibility of interference between different types of medicines. Communication between the patient and the pharmacist always implies influence. Even if it assumes simple information, this is provided with a purpose: to influence the existing beliefs, to change or to have an impact on patient's views. This paper presents a survey of pharmacies conducted in an open circuit in Timis and Arad counties where the ways of transmission and receiving the message about self-medication were recorded. The basic element used in the study was a questionnaire filled in by the pharmacist during the conversation with the client, a better accuracy of the date being ensured. 1570 questionnaires have been registered and validated during the study period of 90 days. The research noted that the most exposed category of patients to the self-medication process is made up of

older people who get or understand only a part of the information that relatives or family members or mass-media offer them. Another extremely exposed category is that one of people with a very low level of general knowledge or medical knowledge. They are very likely to receive and follow unauthorized advice. The most efficient way to fight against the self-medication and which can be available to the pharmacist has been identified as being a good communication with the patients. As a conclusion, the effectiveness of communication in order to reduce the self-medication phenomenon can increase through: 1. Careful observation of the patient – and a correct identification of the problem he has, allocating enough time for that; 2. Simplify the message to be conveyed – the message should be told so that the patient can understand its full meaning; 3. Presenting the truth – credibility always precedes a successful communication; 4. Induce feelings and belief that they will feel better if they take the advice into consideration and so they should act as a consequence of communication.

Keywords: self-medication, efficient communication, pharmacist, patient

The impact of legislative changes on selfmedication with metamizol

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The latest studies in Romania show that over 45% of the population suffers from headaches and migraines, at least once a month, women being more prone to this than men are. Thus, 83% of these patients use self-medication in this regard, with a frequency ranging from weekly to annually. The most frequent causes of these migraines involve stress and fatigue, and the most used treatment is that one based on metamizole, which can be found in over 20 medicines in our country. Starting with April 1st 2001, the 20 medicines that contain metamizole can only be issued by using a medical prescription that the pharmacy retains. The present paper presents a study conducted in 4 pharmacies with an open circuit in Timis and Arad counties where there were cases of self-medication and treatment indicated for migraines and headaches during the study period of 60 days. The period

was equally divided into two parts, 30 days each. They correspond to pre and post the implementation of legal changes regarding the way of releasing metamizole based products. The basic element used in the study was a questionnaire filled in by the pharmacist during the discussion he had with the patient, ensuring a better accuracy of data. 973 questionnaires have been registered and validated on this topic. After interpreting the data, the following results have been concluded. During the first period (pre-implementation of legislative change) over 85% of the patients chose pain relief drugs, the others chose herbal products and other products. The most requested medicine was metamizole (more than 60%), followed by paracetamol and ibuprofen, then aspirin. During the second period (post implementing the change) the medication maintained to the same percentage. The frequency order of using the medicines was the same, metamizole remaining the first one but with a lower percentage (under 50%), followed by paracetamol, then ibuprofen and aspirine.

Keywords: metamizole, self-medication, legislative changes, pain relief drugs.

Quality management of the products containing triterpine and flavonoids

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Flavonoids show a considerable interest because of their biochemical and antioxidant effects potentially benefic to human health. Flavonoids are also very instable compounds, subject to numerous chemical reactions and enzymes during post harvesting and processing storing stage. All these are added to the complexity of polyphenolic composition. A drug can only survive on the market only if it remains competitive, this being achieved by targeting manufacturers for quality by adopting and implementing a quality management system. Total Quality Management (TQM) focuses on continuing improvement processes, so that they are visible, repeatable and measurable, and analyze and eliminate at the same time, unwanted effects that may occur during the production period. The specialty literature has repeatedly noted the importance of developing methods of standardization and characterization of Ginko biloba extract that may present increased variability due to the diversity of raw material sources on one hand, and to the differences in the

extraction methodology, on the other hand. A set of 4 pharmaceutical products are characterized in our study, they all having different origins as far as the antioxidant capacity of using the chemiluminescence of luminol is concerned. There were presented three products as tablets (40 mg declared content of extract/ tablet) and a product as a drinking solution (declared content of 40 mg/ ml). For quantitative evaluation of kinetic curves change due to the presence of antioxidant samples, there have been determined quantitative-geometric characteristics of both calibration and kinetic curves of the samples. The results show a high-class quality management preparation for Tanakan, for which an antioxidant capacity is identified and this corresponds to 0.26 mg vitamin C/ 0.8 medical preparations taken for analysis. This value is at least 10% higher than the values presented for any of the other analyzed samples.

Keywords: quality management, flavonoids, triterpene, antioxidant capacity, chemiluminiscenta.

***Harpagophytum*, an alternative in the treatment of inflammatory rheumatic diseases**

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Harpagophytum is an alternative in the treatment of inflammatory rheumatic diseases. This study is intended as a summary of the data published so far about to anti-inflammatory and analgesic properties of *Harpagophytum procumbens* species. Anti-inflammatory and analgesic properties is based on the composition glycosides of the plant. *Harpagophytum* exert anti-inflammatory and analgesic according to a study by blocking cyclooxygenase 2 and nitric oxide, followed by blocking the formation of prostaglandins (inflammation and pain was prostaglandin mediated inflammatory tissue). The nitric oxide (NO) also known as EDRF (Endothelium-derived relaxing factor) is a gas produced by the endothelial cells, by macrophages and by the cerebral neurons. It produces vaso-dilation, adhesion and platelet aggregation *Harpagophytum* use in case of inflammatory or

degenerative rheumatic brings symptomatic relief and is a viable alternative to medication with NSAIDs, which have many side effects and are contraindicated in patients with diseases of the digestive tract (gastritis, ulcers) in patients with renal or hepatic insufficiency and in patients with asthma. The use of *Harpagophytum* in case of inflammatory or degenerative rheumatism brings about the improvement of the symptoms and represents a viable alternative to the medication with non-steroidal anti-inflammatory drugs which have many unwanted side effects and are counter-indicated for the patients with troubles at the level of the digestive tube (gastritis, ulcer), for the patients with hepatic or renal insufficiency and those with bronchial asthma.

Keywords: *Harpagophytum procumbens*, osteoarthritis, the cyclooxygenase.

Fenugreek seeds – a natural hepatoprotector that prevents ethanol-induced toxicity

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Fenugreek has been used in empirical medicine and as a food additive since ancient times. Lately, its antioxidant and hypoglycemic properties are intensely studied. This paper reports an investigation of hepatoprotective action of fenugreek seed flour in ethanol-intoxicated rats. Animals received ethanol (EtOH) 10% v/v in drinking water, or EtOH and 5% (EtOH+T5%) and 10% (EtOH+T10%) respectively, fenugreek flour (w/w) in a standard diet. After 30 days of treatment, rats were sacrificed, and blood and liver tissue samples were collected for morphological and biochemical assays. The results were compared to values obtained from control animals, and from animals which received EtOH only. Most of the investigated parameters altered by EtOH intoxication were modified by fenugreek seeds in a beneficial manner. Good effects were obtained especially for WBC count and enzymatic activities (ASAT, ALAT, LDH), and were more conclusive with the higher (10%) fenugreek dose. The obtained results are discussed in comparison with data in the literature.

Keywords: ethanol intoxication, fenugreek seeds, immunity, glycemia, transaminases

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Electron microscopy studies on hepatoprotective effects of fenugreek seeds on experimental alcoholic liver

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Because of their content in polyphenolic flavonoids, *Trigonella foenum graecum* seeds have antioxidant and membrane-protective effects, as reported by several Indian research teams. In this geographical area, fenugreek is used not only for its curative effects, but also as a flavoring food supplement. Most studies focused on the hypoglycemic and antidiabetic properties of fenugreek seeds; there are also a few evidences regarding their utilization in preventing alcoholic liver pathology. Our paper was done using an in vivo experimental model, in which animals were administered two different doses of grounded seeds, on the background of ethanol intoxication. Animals were adult male Wistar rats weighing 180-200 g, divided into four groups: a control (C) group, which received a standard diet and water ad libitum; an ethanol-treated group (EtOH) which received the same standard diet and 10% (v/v) ethanol in the water; two groups which had the same ethanol solution instead of drinking water, and their diet contained 5% and 10%, respectively, fenugreek flour (EtOHTr5 and EtOHTr10). The alcohol and fenugreek flour were administered daily, for 30 days. At the end of the treatment period, animals were killed and liver samples were collected, for histological and ultrastructural investigations. The livers of EtOH animals showed macro- and microvesicular fat infiltrations, as well as inflammation in the periportal regions, which are the first areas subjected to neutrophil invasion. Ethanol induced major modifications in hepatocyte nuclei, which had an irregular outline and large heterochromatin areas. Hepatocytes fatty infiltration was accompanied by dilatation of sinusoids, altered function of Ito cells and

proliferation of smooth endoplasmic reticulum (SER). Mitochondria became condensed, electron-dense, with dilated cristae. In EtOHTr5 and EtOHTr10 groups, which received fenugreek flour and ethanol, the structural and ultrastructural modifications caused by alcohol intoxication were much attenuated, better results being obtained with 5% fenugreek. SER proliferation was substantially reduced and the appearance of mitochondria was similar to the one in control animals. The lipid droplets followed the normal transit from parenchymal cells to Ito cells, which preserved their function as lipocytes. Periportal inflammation was also diminished. The majority of parenchymal cells nuclei preserved their spherical shape and were predominantly euchromatic with little, evenly dispersed heterochromatin. Our results plead for the utilization of *Trigonella* seeds as a dietary supplement, to prevent cellular alteration and the onset of steatosis and fibrosis, in subjects with liver conditions produced by excessive drinking.

Keywords: hepatoprotective effects, *Trigonella* seeds, hepatocyte ultrastructure

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SECTION II – Interdisciplinarity in Medical Sciences

ORAL PRESENTATIONS

Assessing the risk for coronary disease in senior patients on chronic dialysis by means of the “6 minutes walk test”

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Objective: Silent ischemia is particularly frequent in patients with chronic kidney disease (CKD). It causes high cardio-vascular mortality, in 20% of cases by acute myocardial infarction. Consequently, objective methods are to be used for actively tracing the coronary damage in this type of patients. Aim: This study proposes to assess the risk for coronary disease in patients on chronic hemodialysis using the “6 Minutes Walk Test” (6MWT). Material and method: We carried out a randomized study on a number of 42 patients on chronic hemodialysis with an average age of >65, without chest pain or ischemic modifications on their resting electrocardiography. These patients were evaluated by two methods: subgroup 1 = 20 patients evaluated by Holter ECG monitoring; subgroup 2 = 22 patients evaluated by the “6 minutes walk test” (6MWT). Results: The study indicated the presence of silent ischemia in 76% of the patients in subgroup 1 and in 79% of the patients in subgroup 2, which confirms that the 6MWT renders comparable results to Holter ECG monitoring. Length of dialysis and insular diabetes are frequently associated in senior patients with silent myocardial ischemia. Thus, 10 patients from both subgroups (22%) presented insular diabetes, out of which 9 (92%) had ischemic modifications. 60% of the examined patients had a length of dialysis of over 24 months, out of which 65% revealed ischemic modifications through both methods of assessment. Of the patients with silent ischemia, 3 presented acute coronary events within 6 months from diagnosis. Conclusions: Elderly patients on chronic hemodialysis have silent myocardial ischemia in a large number of cases. Classical assessment methods do not always provide the expected results: the effort test is often difficult to perform, and coronarography may reveal normal coronary arteries. The 6MWT is a method of assessment that gives comparable results to Holter ECG monitoring, with obvious advantages in what concerns the cost, availability and time of realization. We propose that the 6MWT should be used as a routine test

in the cardiovascular evaluations of elderly patients on chronic hemodialysis.

Keywords: coronary disease, chronic dialysis

Particularity of anemic syndrom in elderly people

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Vitamin B12 plays a critical role in making red blood cells and keeping the nervous system functioning properly. Metformin is considered a cornerstone in the treatment of diabetes and is the most frequently prescribed first line therapy for individuals with type 2 diabetes. B12 deficiency affects approximately 20% of elderly people, although the prevalence varies greatly depending on population studied. We report the case of an 73 yrs old patient, diabetic, in treatment with metformin for 10 years, who presents for symptoms of global heart failure and numbness in lower limbs. In admission he has tegument jaundice-pale, edema in lower limbs, BP= 160/90 mmHg, Hartzler sign. Complete blood count showed pancytopenia and sever megaloblastic anemia, with very low values of seric ferum and B12 vitamin. Also anti intrinsic factor antibody and antiparietal antibody were absent. In association the patient presents hypocholesterolemia and hyperbilirubinemia prevalent indirect hyperbiliruminemia. Also he has edematous syndrome, diastolic dysfunction and EF=40%. After blood transfusion and B12 vitamin administration 100γ per day 7 doses, treatment of heart failure and hypertension the evolution was good, with significant improvement of the symptomatology. We have considered the anemia due to long-term metformin treatment; also hypocholesterolemia and hyperbilirubinemia due to B12 vitamin deficiency. More, the numbness in lower limbs were secondary to diabetic polyneuropathy exacerbated by B12 vitamin deficiency.

Keywords: anemic syndrome, elderly

Diagnosis and treatment in hand interphalangeal arthritis

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Hand osteoarthritis affects 38% of the female population and 24,5% of the male population aged > 60. The clinical picture of hand osteoarthritis, according to ACR criteria, are: pain, limited movement and joint deformation. Radiological exam includes: standard X-ray, the presence of osteophytes, narrowing of joint space, bone scanning. Clinical forms of hand osteoarthritis may be either: a. generalized forms, involving 3 joints or a group of joints b. erosive, with sudden onset, pain, swelling, erythema, joint erosion and aggravating tendency. Therapy in hand interphalangeal arthritis was determined according to 13 multi-centre studies and consists of: -symptomatic fast acting drugs -symptomatic slow acting drugs -chondroprotective agents (GAG-PS) Treatment in hand osteoarthritis is similar with that of knee or hip osteoarthritis. A major role is held by the patient's compliance to treatment, elimination of mechanical risk factors, local physical therapy, analgesics, antiinflammatories. Chondroprotective medicine may prevent, stabilize and even repair cartilage damage. Medical treatment requires individual treatment associated with physical therapy and, in most severe cases orthosis.

Keywords: hand osteoarthritis, standard X-ray, osteophytes, chondroprotective agents.

Hepatitis B and C in dentistry

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Viral hepatitis is a major public health problem, occurring endemically in all areas of the world. The prevalence of the disease is influenced by numerous factors which may be able to modulate its onset. The presence of HCV-RNA in saliva provides a biological basis for saliva as a possible source of HCV infection, although it does not necessarily imply transmission. Lock and coworkers (2006) demonstrates a contamination with HCV-RNA of a considerable portion of toothbrushes used by hepatitis C patients. Dentists were in a high risk of

contracting this disease due to the procedures and instruments of dental treatment. Patients with liver disorders are of significant interest to the dentist because liver plays a vital role in metabolic function, including the secretion of bile needed to fat absorption, conversion of sugar to glycogen, excretion of bilirubin, a waste product of hemoglobin metabolism. Impairment of liver function can lead to abnormalities of the metabolism of amino acid, protein, carbohydrates and lipid. Many biochemical functions performed by the liver, such as synthesis of coagulation factors and drug metabolism, may be adversely affected. Viral hepatitis is the most common liver disorder and is a major public health problem, occurring endemically in all areas of the world. The prevalence of the disease is influenced by numerous factors which may be able to modulate its onset.

Keywords: hepatitis B, hepatitis C

Spasticity in stroke and quality of life

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Background: Spasticity is a state of increased tone with exaggerated reflexes resulting from upper motor neuron injury. The indications for reducing spasticity after stroke remain a topic of ongoing investigation. Methods: Experience of unfulfilled needs after stroke were obtained by taped interview., were stratified by spasticity, gender, duration, and employment status. Twenty-five patients with first-ever stroke were examined initially (mean, 10.4 days) and 3 months after stroke with the Modified Ashworth Scale for spasticity; self-reported muscle stiffness; tendon reflexes; Get-Up and Go test; and Barthel Index. Results: Of the 25 patients studied, 15 were hemiparetic, 10 were spastic, 6 reported muscle stiffness, and 18 had increased tendon reflexes 3 months after stroke. Patients who were nonspastic had statistically significantly better motor and activity scores than spastic patients (n=18). Conclusion: Spasticity was associated with fatigue, pain, immobility, and poor balance. Severe disabilities were seen in almost the same number of nonspastic as spastic patients. These findings indicate that the focus on spasticity in stroke rehabilitation is out of step with its clinical importance. This led to limitations in activity and increased dependency and has a great impact on quality of life.

Keywords: spasticity, stroke, quality of life

The outcome of patients with primary intracerebral hemorrhage after acute episode. Clinical study.

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Background and objective: Primary intracerebral hemorrhage (PIH) accounts for around 20% to 25% of all strokes in County Hospital Arad. The purpose of this study was to estimate the risk factors, early course, outcome and neuroimaging patterns in primary intracerebral hemorrhages. Methods: All PICH patients hospitalized in Department of Neurology from 2007-2010 in Clinic County Hospital Arad were included, and patients who survived the 1st 30 days were recruited. The demographic data, clinical characteristics, and the CT finding were reviewed. Secondary causes of ICH were excluded. The electronic records of each of the patient at least 5 years after the index stroke were retrieved. Results: A total of 190 cases of PICH were identified. Seventy-nine (29.6%) died within the 1st 30 days of their admission. Of the remaining patients, 39 (20.3%) patients died within 5 years. Predictors of mortality within 5 years were advanced age, smoker, and drinker. 10 patients had recurrent ICH (recurrence rate: 1.26% per year). Fifteen patients had recurrent ischemic stroke (recurrence rate: 2.12% per year). Younger age is a significant predictor of recurrent ICH, whereas presence of HT and male sex are potential predictors of recurrent ICH. Locations were lobar (46.5%), lenticular (36%), thalamic (12.7%), cerebellar (10.8%), midbrain and pons (2%), intraventricular (3%), caudate (1%) and multiple (2%). Risk factors included hypertension (64.5%), alcohol (16%) anticoagulant treatment (10%) and none (29.2%). The largest mean volume was in putaminal (48 ml) and lobar (37.2 ml) locations. Conclusion: The 30-day mortality rate was 24.2% with 48% of all deaths occurring in the first 3 days. Death and 30-day survival status were closely associated with PIH volume ($p < 0.0001$) Patient with PICH are at risk for developing both ischemic stroke and recurrent hemorrhage. Patient with PICH initially at the deep site is a risk factor for ischemic stroke.

Keywords: primary intracerebral hemorrhage, clinical study

Egoism, Narcissism, I love just myself.

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„Egoism, egocentrism, narcissism“ are often used as synonyms, although they have little in common from the scientific point of view and can be well distinguished. The author explains in this article the concept of narcissism as a personality disorder, discussing different theories of psychopathological developments leading to this form of disorder and psychodynamic implications on intra and inter-relational situations. Another aspect of this article is the change of attitude towards persons with narcissist personality. Narcissism is in our modern times no longer a stigma, we find narcissistic personalities in top positions in management, show business and politics, narcissistic personalities are well accepted and respected by the new generation as successful idols, this change of attitude is discontinuous, progressive and mostly unobserved by society as shown in recent studies. The Author concludes that deterioration in social interrelations and social behavior as well as the loss of psychosocial responsibility for others and especially for weak members of our society are caused by modern principles of success at any price and the best adapted in such a “success at any price society” are individuals with a more or less narcissistic personality. As in recent years we see an enormous increase of depressive individuals (WHO Studies indicate that by the year 2050 about 50% of earth population will suffer from chronic depressive disorders) and a continuous growing number of individuals with narcissistic disorders we might be heading towards a society divided in a majority of depressive “losers” led by a minority of narcissistic “winners”.

Keywords: egoism, egocentrism, narcissism, psychosocial behavior

Faecal calprotectin - clinical signification

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Patients with intestinal disorders, most commonly characterized by various symptoms such as: cramping, abdominal pain, bloating, constipation or diarrhea, often requires many laborious and expensive investigation to make the difference between functional or organic

diseases. Calprotectin discovery help to make the difference. Calprotectin is a calcium binding protein abundantly in the cytosol of the neutrophils and in lower concentrations in monocytes and macrophages, it is found both in the plasma and in stool. Calprotectin is extremely stabile in the faeces. Usually its concentration is elevated in infectious and inflammatory or other organic gut damages (such as, colonic cancer and/or damages produced to the bowel by non steroidal anti inflammatory drug treatment). Faecal calprotectin is a marker for inflammatory and neoplastic gastrointestinal diseases. It would represent a surrogate marker of increased neutrophils concentration in the bowel. Using faecal calprotectin is a simple, noninvasive and low cost test. Many studies done worldwide shown that faecal calprotectin has application in making difference between functional and organic intestinal disorders (reducing the number of unnecessary colonoscopies), monitoring the evolution of patients diagnosed with inflammatory bowel diseases but researches are ongoing and will highlight other potential roles of faecal calprotectin.

Keywords: faecal calprotectin, intestinal disorders

Risk factors for cholecystectomy in patients with gallbladder stones endoscopic clearance of common bile duct stones.

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Background. This study aimed to evaluate risk factors for cholecystectomy in patients with GB stones after complete endoscopic clearance of CBD stones. Patients with gallbladder (GB) stones who previously underwent endoscopic removal of common bile duct (CBD) stones have indication by cholecystectomy. However, in practice, many patients still have GB stones after improvement of their biliary symptoms.

Methods. From 2008 to 2009, the medical data of 61 patients with concomitant GB stones who underwent complete endoscopic clearance of CBD stones were reviewed retrospectively. The risk factors for subsequent cholecystectomy were evaluated during a 24-month of follow-up period.

Results. Among the 61 patients, 12 (19.7%) subsequently required cholecystectomy for recurrence of biliary symptoms, and 11 of these 12 patients (91.7%) needed cholecystectomy within 12 months. Gallbladder stones

10 mm or larger ($p = 0.037$) and the acute pancreatitis ($p = 0.049$) were the independent risk factors for subsequent cholecystectomy. The actuarial probability of remaining free of subsequent cholecystectomy during the follow-up period was higher for the patients with GB stones smaller than 10 mm than for the patients with GB stones 10 mm or larger (86.7% vs. 62.5%; $p = 0.037$). In addition, the patients with acute pancreatitis had a higher tendency for subsequent cholecystectomy than the patients without acute pancreatitis (50% vs. 16.4%; $p = 0.078$).

Conclusions. Only a small number of patients subsequently needed to undergo cholecystectomy for recurrence of biliary symptoms, and most events developed within 12 months. For the patients with GB stones 10 mm or larger or acute pancreatitis, prophylactic cholecystectomy is strongly recommended after complete clearance of CBD stones.

Keywords: cholecystectomy, common bile duct stone, gallbladder stone, risk factor

Diagnostic and prognostic significance of ASO titer in streptococcal infection in children

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General dates, Streptococcal infection (IS) is still a priority public health problem in our country, the incidence and risk of immunological complications likely to arise. Streptococcal angina (SA) by far dominate the clinical picture of HE in children may suggest the etiology and clinical adolescent. Streptococcal etiology of clinical symptoms may suggest, but bacterial cultures are sovereign. Determination of specific antibodies against streptococcal cell components can confirm or support the diagnosis of IS. Titre ASO (anti streptolysin O) are most often used for diagnosis. Magnitude ASO titre correlate directly with the possibility of immunological complications. Material and method, The study was conducted on a sample of 326 cases with AS, diagnosed and treated in ambulatory pediatrics Arad. In this group, 299 (91.71%) had increased over the standard ASO in relation to age. ASO titre values were correlated with a number of parameters, age, sex, place of origin and the material conditions, clinical symptoms, presentation to the doctor, throat culture, nesupurative complications. The data obtained were a source of analysis on weight

ASO titers in the diagnosis and prognosis IS configuration. Results and discussions, ASO titre, immunological test is most easily accomplished, inexpensive and easy to reproduce. Diagnostic and prognostic value is determined in the dynamic and confirms a recent IS or late. Normal values are determined in the light of; age under 160UT (Todd unit) to 5 years to 9 years in 240U.T. to 9 year, 320U.T. until 18 years and under 200U.T.at adult. Age Maximum receptivity is between 6-14 years-184 (61.53%) falling below 5 years, 27 (9.03%). Relative to sex are nothing suggestive. Habitat conditions have shown a high incidence of IS 232 (93.54%) in those with poor conditions (crowded, in communities and families, etc.). Presentation to the doctor in the acute phase of AS at 5-6 days after onset was 189 (63.21%) compared to 110 cases (36.79%) after 9 days.Begining the treatment after 9 days would promote increased ASO appearance. Analyzing the correlation with clinical symptoms, it was found that 90% of cases had increased and ASO. Our observation showed that the ASO was now increased to 259 cases (86.62%) patients with positive throat swab for streptococcus in 40 (13.38%), the ASO negative.Positiv crops grown even if it IS confirmed was proven by culture. ASO correlation with acute phase reactants, increased ESR 217 (72.57%), elevated CRP 243 (81.27%), increased fibrinogen 98 (32.78%), of interest for diagnosis, confirming a recent IS, even in absence of positive cultures and show that there is real potential of developing immunological complications. RAA major complication of type (rheumatic fever) or acute glomerulonephritis were absent, but were developed in August (2.4%) minor post-streptococcal syndromes, 15 (4.60%) and nine recent streptococcal infections (2.76 %) ISrecurente.In all cases ASO titer was elevated acute phase reactants and increase accompanied by clinical symptoms. The appearance of these forms of clinical, degradate"de RAA is the natural evolution of disease expression but also the best treatment conditions. Conclusions, IS remains a priority public health problem. Nesupurative complications that can result, especially after cardiac sequelae distracted clinicians. ASO titre is immunologic marker that can help and sometimes trance as strep throat clinic, contributing to their diagnosis and prognosis.

Keywords: ASO, streptococcal infection

Labioplasty

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Labial hypertrophy is the disproportionate size of labia minora relative to labia majora. Labiaplasty also known as labia reduction, vaginal lip reduction or labia rejuvenation is a procedure strictly designed to improve appearance of external female genitalia. Goal is to obtain more aesthetic appearance avoiding unsightly scars or distorting normal anatomy. Etiology of labia minora hypertrophy is multifactorial. Congenital. - Mechanical irritation by intercourse or masturbation. - Lymphatic stasis. - Chronic irritation. - Inflammation from dermatitis. - Urinary incontinence. - Child birth by vaginal route. - Genital piercing with heavy hardware. Possible role of genetics (same degree of labial hypertrophy in identical twins) Surgical treatment: AMPUTATION TECHNIQUE: Involves simple amputation of the excessive portion of the labia and sutured. Main drawback of this technique is loss of the natural corrugated free edge of labia. CENTRAL WEDGE RESECTION: First described by Dr. Alter involves full thickness resection of wedge tissue. DE-EPITHELIALIZATION TECHNIQUE: It involves de-epithelializing a central area on medial and lateral sides of each lip. LASER LABIAPLASTY: This technique is the same as de-epithelialization with the exception that excess skin epidermis is removed with laser instead of scalpel. LABIAPLASTY WITH CLITORIS UNHOODING: Surgical procedure to correct this is known as "unhooding of clitoris" COMPLICATIONS: Bleeding. - Infection. - Asymmetry - Poor wound healing. - Under or overcorrection. - Nerve damage with formation of painful neuromas. - Tissue necrosis. - Scalloping along the free border. FUTURE AND CONTROVERSIES: Female genital cutting (FGC) refers to amputation of any part of female genitalia for cultural rather medical reasons. Opponents of these practices use the terms female genital mutilation or female circumcision.

Keywords: labial hypertrophy, labiaplasty, lymphatic ltitas - wedge resection - de-epithelialization - skin epidermis - clitoris unhooding - painful neuromas - female genital cutting (FGC)

Spinal and epidural anesthesia in inguinal hernia cure

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Introduction. Regional anesthesia is widely used in hospitals around the world precisely because of low risk and better cost-effectiveness. This paper presents the effects of spinal and epidural anesthesia in inguinal hernia surgery to cure.

Material and method. We conducted a study on a sample of ninety-eight patients (91 male and 7 female) diagnosed with unilateral inguinal hernia, admitted Arad Municipal Hospital for a period of one year. Patients were randomized into two groups. In group I patients have received spinal anesthesia and in group II epidural anesthesia using bupivacaine glycosylated (20mg) or spinal bupivacaine 0.5% (100mg). Were recorded and interpreted during the installation of anesthesia, postoperative recovery, duration of surgery, need for analgesia during hospitalization, response to pain based on analogue pain scale, postoperative and postanesthesia complications.

Results and discussions. Postoperative pain occurred at 3-6 h, and the surgery lasted 40-60 minutes in patients with epidural anesthesia, and those with spinal anesthesia on postoperative pain occurred at 1-3 h, and the surgery lasted 30-40 minutes. Postoperative recovery was longer in patients with complications due to spinal anesthesia (headache occurring within 24 hours, at 2% of patients). Response to pain analogue pain scale occurred at 12:24 hours and was much increased in both groups of patients. The difference was statistically insignificant between the two groups (patients with spinal and epidural anesthesia) on track parameters.

Conclusions. Spinal anesthesia by epidural is different from that small changes in the duration of surgery, postoperative period, pain and postoperative complications and the difference in response to pain analogue pain scale.

Keywords: epidural anesthesia, spinal anesthesia, inguinal hernia, pain

High altitude physiology and pathophysiology: anesthetic considerations

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Introduction. Millions of people live, work and travel in areas of high altitude where barometric pressure is low. Skiers, climbers and people from rescue service reach altitudes of 2500m or 8000m for more than recreation, but the sharp rise at high altitude without acclimatization benefits is increasingly common. High altitudes have significant effects on the human body, particularly on the cardiovascular and respiratory system, as oxygen saturation decreases due to lower ambient barometric pressure. Material and methods. Rapid ascents to high altitudes can cause certain disorders that are sometimes fatal. Other causes, such as very low temperatures, dehydration, strong winds and intense solar radiation at high altitudes increase patient morbidity. Anesthetists working in or visiting areas of higher altitudes should become familiar with human physiology, pharmacology, changes and evolution of high altitude diseases. These disorders can divide them into four categories: acute high altitude syndrome, high altitude cerebral edema, high altitude pulmonary edema and chronic high altitude disease. There are many circumstances in which the anesthetists are challenged to care for patients at high altitudes in various intensive care techniques (cardio respiratory cerebral resuscitation, correction of arrhythmias, insufficient organs, etc.). Conclusions. Anaesthetists of physiological and pharmacological knowledge and their ability to conduct the management of patients with diseases caused by high altitude places it on the front line to solve the complication in these situations.

Keywords: high altitude, high altitude data problems, hypoxia, anesthesiologists

Management of risk factors in patients with mild cognitive impairment

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Demographic characteristics of our time is the aging population, especially in industrialized countries - one out of ten people is over 60 years, so the prevalence of cognitive dysfunction, is growing. Mild cognitive impairment (MCI), considered today as a prodromal phase of dementia, is an evolution estimated at 10-15% annually, over 50% of patients with MCI will develop dementia in about five years. MCI primary prevention involves treatment of risk factors (hypertension, hypercholesterolemia, hypothyroidism, diabetes mellitus, obesity, depression, sleep disturbances) performed by

pharmacological interventions and antiaging products (Omega-3, natural products from plants, *Rhodiola rosea*, Vinpocetina), antioxidants (coenzyme Q, vitamin A, vitamin E), trophic brain. Pharmacological interventions include lifestyle changes for the patient through: Mediterranean diet, exercise, memory exercises, recognition of stressors, improving nictemeral pace. The management of risk factors was applied and followed for 12 months at a total of 150 subjects diagnosed with cognitive impairment and were easily detected at least five factors. The three study groups were selected as follows: Group A - received no pharmacological and pharmacological interventions, group B received pharmacological interventions and trophic cerebral group C received only trophic brain. For the diagnosis of MCI have been applied to cognitive impairment rating scales (MMSE, Clock test) before and after application of primary prevention program. There was a significant improvement in cognitive function, with an increase in MMSE values between 2 and 4 points to 76% of group A subjects, 42% to 26% subjects in group B and group C subjects. In conclusion, primary prevention is reducing the risk of dementia through: exercise, jogging intellectual diet, not smoking and regular medical checks to monitor blood pressure, glucose, cholesterol.

Keywords: risk factors, cognitive impairment

Depression in third age patients, clinical and biological aspects

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Depression is one of the most common mental disorders; the risk of developing a depressive disorder throughout life is 15% (Meltzer, 1995). According to World Health Organization, currently, the depressive disorder is the fourth cause of disability, and in 2020 is expected to reach second place, after cardiovascular disease. The neurobiology of depressive disorders involves interrelations between the cerebral structural vulnerability and the neurobiochemical vulnerability. The main changes in brain structures (frontal cortex, anterior cingulate cortex, amygdala, thalamus, hippocampus) are achieved by involving cortico-subcortical circuits, which determine the emotional control and the efficiency of the cognition. The main neurotransmitters involved in the etiopathogenesis of depression are serotonin, dopamine and norepinephrine. The correlation of clinical symptoms of one deficiency of these neurotransmitters

predominantly points towards three major forms of primary depressive disorder: depression by the deficiency of norepinephrine, depression by the deficiency of serotonin, depression by dopamine deficiency. Identifying these three clinical forms of depression allows a correct antidepressant treatment, avoiding a non-therapeutic response or an incomplete response to the treatment.

Keywords: depression, third age

Predictive factors in chronic viral hepatitis B in children

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Background: chronicity of acute hepatitis is governed by endogenous and exogenous factors; endogenous factors (Immunogenetically), which may explain the increased sensitivity to viral infection or prolonged porting are difficult to analyze, but those exogenous can be quantified. Aim - to achieve systematization and a hierarchy of risk factors, identifying factors related to the etiologic agent, the human body and the socio-ecological system for the two groups of patients (a group represented by patients with evolution to recovery and another one with chronic disease). Based on the hierarchy it was proposed an analysis of the risk factors with the value of predictability. Material and Methods: The study included a total of 568 patients with acute HBV, aged between 2 and 8 years, hospitalized in Pediatric Infectious Diseases Department in the last 15 years, of which 48 met criteria for chronic patients. To evaluate the risk factors we used the method of analytical epidemiology (relative risk and attributable risk) and risk index forecast. All clinical events were analyzed, hereditary-side, epidemiological and laboratory records of patients. Results: Was identified 1. Elements with high predictive role for the following parameters, young age, rural, long period of hospitalization at the onset HVB, parental history of chronic liver, low education level of parents, hepatomegaly on admission and discharge, astheno-dynamic persistent, MPC, persistent loss of appetite, hypergammaglobulinemia and concomitant acute and chronic diseases. 2. Elements with an average predictive role: constant increase of ALT, bilirubin levels without a change. 3. Elements with low predictive role: age 6-12 years, hypoproteinemia, liver disease without specifying the etiology. Conclusion: at the multifactorial analysis there were recorded predictive indicators weighted as high, medium and low.

Keywords: predictive factors, chronic hepatitis, children

2010 Arad County SMURD interventions

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Emergency Department of Arad County Hospital coordinate 9 prehospital emergency medical teams: one mobil intensive care unit and 8 first aid teams – Barzava, Chisineu-Cris, Ineu, Sebis, Gurahont, Birchis, Nadlac si Vinga. In 2010, total number of emergency medical interventions are 5202 from which 2650 Arad Mobil Intensive Care Unit and 2552 first aid teams. The main types of interventions of Arad Mobil Intensive Care Unit was:

- road accidents – 299 cases
- falls from height – 92 cases
- aggressions- 52 cases
- work accidents – 4 cases
- cardiac emergencies – 659 cases
- neurological emergencies – 492 cases
- intoxications – 183 cases
- medical emergencies – 603 cases
- pediatric emergencies – 198 cases (180 medical cases and 38 trauma)
- psychiatric emergencies – 99 cases
- obstetric emergencies – 24 cases

In 116 cases Glasgow Coma Scale was under 8.

The Arad Mobil Intensive Care Unit assisted 113 cases of cardiac arrest: 15 ventricular fibrillation, 74 asystole and 24 pulseless electrical activity. We resuscitated with return of spontaneous circulation 23 cases 6 ventricular fibrillation, 7 asystole and 10 pulseless electrical activity. The percentage of successfully resuscitation was 20,3%.

The age of patients assist by Mobil Intensive Care Unit are:

- 0-1 year: 53 cases
- 1-16 years: 143 cases
- 17-50 years: 777 cases
- over 50 years: 1677 cases

A big new challenge for us is telemedicine. We start to use data transmission (ECG, vital signes) from prehospital first aid and ambulances teams to ours emergency department.

Keywords: prehospital emergency medical teams, Mobil Intensive Care Unit, cardiac arrest, telemedicine

The role of the social worker assisting the drug consumer

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According to the definition given by the World Health Organization, the excessive, continuous or sporadic use of drugs, incompatible or with no connection with medical practice, is considered consumption or abuse. Who considers that unfortunately there are as many kinds of addictions as many kinds of drugs. The person called "drug addict" is the person whose life and thoughts are driven by drugs. That person lives in order to get drugs and gets drugs in order to live. The social worker plays a very important role, besides the medical doctor and the psychologist, in treating the drug consumers, in the medical treatment, the reintegration and rehabilitation of the drug addicts. The main purpose is to help the drug addict to reach abstinence.

Case I

A 16 years old young girl, from Arad, lives with an aunt who has taken care of her since she was 5, when a tragic accident happened and her parents died. During the day she comes at the Clinic Hospital, at the Emergency Unit being agitated with behaviour problems. From what she told we found out that she got drugged with a powerfully hallucinogenic substance called cranks. As a social worker, I got some information from the patient. I called the police – the anti-drug Office so that they should come and talk to the patient about the place where she bought the drugs, and which is the drug dealers network. The patient is advised for hospitalization in order to be given treatment at the infantile neuropsychiatry ward.

Case II

A 17 years old young lady, from Ineu comes at the Clinic Hospital from Arad, at the Emergency Unit. She was brought by her mother as she had a strange behaviour, she hardly cooperated and she had hallucinations. She came to the hospital for investigations and for treatment. She never had such a behaviour. Because the patient is not cooperative, has behaviour problems she is put into hospital at the infantile neuropsychiatry ward. As social worker, I wrote down the information from her parents and I advised them. I also called her teacher from the school in Ineu in order to find out if she went to school and if she was able to study. I also inquired about her group of friends. She was investigated in the hospital. Her blood was also tested to find out any narcotic substances. The result was positive. The police was

called – the anti-drug Office so that she could be recorded and monitored. The group of suspects who sold her the drugs was found.

Keywords: simulation, model, femur, biomechanics, fractures

Psychological factors and somatic diseases

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Psychosomatics is a medical integrative, modern concept, which allows the approach of somatic disorders as a reaction to experiences of emotional tension (stressors, conflicts, losses), or psychiatric manifestations secondary to organic diseases, including some psychosomatic suffering produced by mechanisms of "circular reinforce" (Chiriță 2002).

Keywords: psychosomatic, stressor, somatic disorders, psychotherapy

Hemostatic function in healthy pregnant and preeclamptic women: an assessment using the Platelet Function Analyzer (PFA-100®) and Thromboelastograph®

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The PFA-100® is a point-of-care platelet function analyzer which measures the speed of formation of a platelet plug in vitro, expressed as closure time (CT) in seconds. This device could potentially be used to assess primary hemostasis prior to regional anesthesia. In this prospective, observational study we sought to establish 95% reference intervals for PFA-100 and Thromboelastograph® (TEG®) values for our normal pregnant population, before comparing the PFA and TEG in measuring platelet function in preeclamptic and healthy pregnant women at term, using confidence interval analysis and analysis of variance. To this point routine hematologic and coagulation tests were performed along with von Willebrand Factor, CT, and TEG measurements. Results are expressed as mean (sd). Increased severity of preeclampsia was associated with increasing prolongation of CT, even in the presence of

normal platelet counts. In severe preeclampsia, the PFA-100 CT (mean (sd): 155 (65) s) exceeded the 95% reference interval of the control group (70–139 s). In contrast, TEG maximum amplitude (MA) in severe preeclampsia (mean (sd): 71 (8) mm) remained within the 95% reference interval for MA in normal pregnancy (64–82 mm). We concluded that impairment of primary hemostatic function with increasing severity of preeclampsia was recorded by the PFA-100 but not the TEG.

Keywords: Platelet Function Analyzer, PFA-100®, Thromboelastograph®, preeclampsy, coagulation time.

Virtual Organism

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A new era is here. Now we can use the unlimited possibilities of computer technology to create new organisms. At MIT a virtual cell called MorphoPotts (Sébastien Tripodi, Pascal Ballet and Vincent Rodin 2010) was defined. This MorphoPotts is based on the cell defined in the Cellular Potts Model. The MorphoPotts model keeps the properties of the original cell and adopts the cellular behaviors that have been added. In the CPM the cell shape is represented only by a target volume and surface. Through analytical analysis we can propose and implement a target shape therefore, a set of springs is given to the MorphoPotts to build the shape. These springs provide an energy which is used to build a new function of energy in the CPM. The target shape was tested in two simulations by Tripodi and his colleagues. The first one shows us that it is possible, with this target shape, to give a complex form to the MorphoPotts. The second simulation shows us that this target shape allows structuring of the cellular tissue. Combined with the energy of contact, the target shape allows the MorphoPotts to self-align. By adding the notion of internal energy, available in the notion of the MorphoPotts, the second simulation shows us that the MorphoPotts self-organize in order to form a cellular tissue. This tissue has a recognizable shape and a dynamical tissue renewal. At this point we have the first step to developing an entire multi-cellular organism.

Keywords: MorphoPotts, simulation, virtual cells

Evaluation of the electronic health record's functions in occupational medicine

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Starting from the requirements of realizing the medical file in occupational medicine we have structured a model of Electronic Health Record that should integrate the main functions and criteria required by European and American certification bodies. The occupational medicine service is the real but temporary owner of the Electronic Health Record with full access to all the data in order to provide the necessary support for medical decisions. The research focused on the effects and impact of the Electronic Health Record on the main decision makers: the specialists in occupational medicine. We performed a questionnaire based survey of specialists in occupational medicine from 5 counties regarding their opinion on Electronic Health Record after its trial in practice. The Electronic Health Record functions, correlations between advantages or disadvantages as well as factors that might stimulate its integration in current medical practice were studied. There was general favourable consent among the occupational physicians regarding Electronic Health Record. Its employment in medical practice, with all the perceived benefits depends on the legislative support and presence of financial incentives or implementation projects at national level.

Keywords: Electronic Health Record, Occupational Health Services, Standards in Occupational Health

Epidemiological characteristics of ocular trauma in the Ophthalmology Clinic of Arad

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Purpose. To identify the epidemiological characteristics of ocular trauma by analyzing its etiological and clinical aspects. Methods. All cases of ocular trauma were recorded and analyzed between 2007 – 2010 in the Ophthalmology Clinic of Arad. Epidemiological aspects (incidence, prevalence) and etiological factors of ocular trauma were documented. Results. From a total of 22.506 emergencies, 734 were ocular traumas which represents about 3,25% general incidence. The incidence of cases in correlation with the number of total trauma in this period was 74,1%. Most of the ocular trauma was reported in patients with ages between 15 – 50 representing 66,7% in comparison with the number of ocular trauma. Men

represented 79,5%. General causes of injury were home accidents (concoctions with different objects like wood, metal, three branches) and represented 48,5%. From the anatomical point of view the most frequent regions traumatized were those of the ocular adnexes representing 89,9% where from conjunctival lesions represented 54,8% and lid trauma 35,1%. Anterior pole trauma represents 9% and posterior pole less than 2,1% of total ocular injuries to the eye. Conclusions. Ocular trauma represents an important part of ocular traumatology in the Ophthalmology Clinic of Arad and the most frequent cause is that of home accidents. To prevent these and diminish the number of injuries to the eye more accurate and effective medical education and proper safety equipment is needed.

Keywords: Ocular trauma, accidents, conjunctiva injuries

Surgical treatment of primary and recurrent pterygium

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Pterygium is a degeneration of the limbal conjunctiva commonly induced by ultra violet sunlight fact confirmed by many epidemiological studies in recent years. Risk factors include working outdoors, increasing age and male gender. Regular wearing of adequate sun protection is an economical and simple prophylaxis with proven effect and is recommended, as well as public education, in particular to groups of people who exercise their profession outdoors. Surgical treatment is indicated when there is a reduction of visual acuity secondary to the development of irregular astigmatism and an obscuration of the visual axis by the tumor. Another indication of surgery is that of poor cosmetic appearance and lack of corneal lubrication. One of the most popular surgical techniques in most countries is that of "bare sclera" or free conjunctival autograft with or without antimetabolite therapy. This article reviews modern surgical techniques in the treatment of pterygium like simultaneous transplantation of conjunctival and limbal stem cell autografts, preserved amniotic membrane. Another method is to make a lamellar sectorial corneal graft if there is a deep corneal defect. The technique of suturing the graft has been replaced by fibrin glue in some surgical centers.

Keywords: surgery, conjunctival graft, antimetabolite

Ocular hypertonia in acute uveitis

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PURPOSE. Analyzing the frequency and mechanism of ocular hypertonia in a group of 43 patients hospitalized in Department of Ophthalmology, Municipal Hospital of Arad in the period 2009-2010. We performed a retrospective study which included 43 patients diagnosed with acute uveitis. Ocular hypertonia is defined by an intraocular pressure greater than or equal to 21 mmHg occurred at least once during evolution. The following parameters were analyzed: **METHODS-** age of first onset of uveitis flare - gender divide - hypertonia mechanism - use of filtering surgery **RESULTS** Among 43 patients diagnosed with acute uveitis, which were introduced in the study, a total of 15 patients (36.8%) had during the disease's evolution at least one episode of ocular hypertonia. All forms of the anterior uveitis represent 76% (33pacienti). There was no significant difference between gender and age. 16 patients (36%) had uveitis of infectious origin; most of them were associated with herpetic disease. Ocular hypertension was controlled with topical treatment 73.3% (11 patients). Surgery was required in 26.6% of cases (4 patients). **CONCLUSIONS:** This retrospective study confirms that ocular hypertonia is a common and potentially severe complication of uveitis, especially those related to viruses. Most of the cases have responded rapidly to combine topical antiglaucomatous and steroids therapy.

Keywords: uveitis, ocular hypertension, herpes virus simplex

Optical illusions, memetics and the significance of culture

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Optical illusions are the price to pay for making sense of our visual representation of the world. Color contrast and color constancy are two of the most important mechanisms underlying the purpose of our visual brain: the generation of signification. The White effect undermines the classical explanation of the contrast illusions: the receptive field properties cause ganglion cells to fire differently depending on whether the surround of the equiluminant target is dark or light. Perhaps a better explanation is that brightness percepts are generated on a statistical basis as a means of

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contending with the inherent ambiguity of luminance on the basis of what the luminance of the test patches had typically turned out to be in the past experience of human observers. From this we infer that the 'utilitarian 'view' floods all the other cognitive attributes of our brain. The way we understand anything is inextricably linked to the way our brain perceives information. So our 'intuitive' understanding is predisposing to the same illusions. The fact that the 'great leaps forward' of our postmodern science are basically counter-intuitive (Darwinism, Einstein relativity, puzzling gödelian theorems, and quantum theory) demonstrates this eloquently. What we see and what we understand is the legacy of eons of evolution. Memetics give an attractive way of understanding human culture from this perspective.

Keywords: optical illusions, color contrast, color constancy, memetics, human evolution, intuition

Fixed combinations in the management of hypertension and additional cardiovascular risk factors

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It has long been known that increased blood pressure (BP) is a risk factor for cerebrovascular and cardiovascular (CV) mortality. Hypertension represents one of the three leading causes of visits in primary healthcare centers. Data from the Framingham study suggests that 80% of hypertensive patients have at least one additional CV risk factor. These additional risk factors tend to cluster and include glucose intolerance, obesity, left ventricular hypertrophy and dyslipidaemia. Among patients with hypertension, about 40% of coronary events in men and 68% in women are attributable to the presence of two or more additional CV risk factors. The observation that initiating treatment with combination therapy can have long-term benefits is reflected in the 2007 European Society of Hypertension (ESH) /European Society of Cardiology (ESC) guidelines. These recommend a two-drug combination at low dose as first-line treatment rather than monotherapy in patients presenting with grade 2 or 3 hypertension or with high or very high total CV risk or who have a lower target BP. Advantages of two-drug combination in first line of treatment: BP targets may be reached earlier than with monotherapy, both drugs can be given at low doses so that the risk of side effects is minimised, some drug combinations can attenuate the side effects associated

with the single agent, patient compliance may be improved by achieving target BP earlier, especially in patients with very high BP and by simplifying treatment and fixed low-dose combinations are available in a single tablet. In patients uncontrolled or with the presence of two or more additional CV risk factors therapy, the fixed combination is the next logical step to monotherapy, and may result in synergistic BP reduction and complementary clinical benefits due to the different modes of action and the additional benefits of the individual drugs.

Keywords: hypertension, fixed combination

POSTER PRESENTATIONS

Assessment of physical function, disability and quality of life in rheumatoid arthritis

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The comprehensive ICF Core Set for rheumatoid arthritis (RA), evolutive and invalidant disease includes two parts: functioning and disability, contextual factors. Each part has two components: 1. body functions and structures, activities and participation 2. environmental factors and personal factors. The ICF (International Classification of Functioning) Core Set for RA includes 25 categories from the component Body functions, 18 from component Body structures, 32 from component Activities and Participation and 21 from Environmental Factors; each of the ICF categories is quantified with the qualifiers' scale and has five response levels. Reliability of the ICF RA set is low to moderate. HAQ (Health Assessment Questionnaire) is based on five patient centered dimensions: disability, pain, medication effects, costs of care and mortality in the revision on quality of life. HAQ-DI (HAQ disability index) has been adopted in more than 60 different languages, has become part of the National Institutes of Health "Road map Project the Patient Reported Outcomes Measurement Information System" (PROMIS). He contains HAQ's patient global and pain visual analog scales (VAS). There are 20 items in 8 categories, that represent a comprehensive set of functional activities (dressing, resing, eating, walking, hygiene, reach, grip and usual activities). Each category contains at least two specific subcategory questions. Pincus proposed MHAQ (Modified Health Assessment Questionnaire) which was used in clinical trials and

reduced the number of questions to 8, 1 question for each category. HAQ II were described in 2004 and is a psychometrically improved 10-item version and better correlated with clinical measures and is suitable for use in the clinic and research studies asking: "are you able to" instead of "performance of an activity". MDHAQ (Multidimensional Health Assessment Questionnaire) includes 8-10 items: physical function, pain, global status, morning stiffness, psychological distress (anxiety, depression, sleep), change in status, a review of systems, a RA disease activity self report joint count (RADAI), review of recent health events and review of medications. The MDHAQ can be used in the infrastructure of rheumatology care to include quantitative data in standard care of all patients with all rheumatic diseases. Quality of Life (QoL) is an important indicator of the burden of musculoskeletal (MSK) disease. The physical domain is predominantly affected, but mental and social function are also impaired and this evidence reinforces recommendation for early treatment and primary prevention.

Keywords: rheumatoid arthritis, physical function, quality of life

Statistical research of professional stress to military employees of Administration and Interior Ministry

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This study identifies existing sources of stress in military work environment, employment and the main display categories, the main manifestations of stress for M.A.I. workers, occupational stress-related pathology and epidemiological methods to investigate the risk factors. The nature and specificity, the military work environment is a general environment of occupational stress. For Romania, the last few years have witnessed a period of transformation and restructuring of social, political, economic, which were extended to the socio-military organization. Psychological implications of these changes are the most varied and highly diverse psycho relations and completion unfortunately unpredictable and surprising. In the military work environment these changes were followed by optimizations in some departments, but more often they started malfunctioning. The specific problem at work today is chronic fatigue syndrome, characterized by physiological and emotional exhaustion and frustration often caused by chronic level,

the volume of work coupled with too much or too little work. Symptoms include an increase in alcohol consumption, coffee and even drugs, depression, low self-esteem, pessimism and loneliness, an increase of unjustified absences, delays, fatigue, irritability, muscle tension and stomach problems, loss of sense of humor and an increased feeling of guilt. The literature cites increased stress and mental demands as preponderant causative factors of diseases related to occupation. In this category we can include hypertension, coronary heart disease, digestive disorders, neuroses and other neuropsychiatric disorders.

Keywords: professional stress, the Ministry of Interior, objectivity methods

Antibiosusceptibility in children's Salmonella diarrhoea – a 5 year study

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Objectives: The authors studied the antibioticsensitivity versus resistance models in Salmonella diarrhoea of children from the western part of the country. Based on these models they aimed to create a local guide. **Methods:** The group consisted of 155 Salmonella strains, isolated from children with acute diarrhoea. The children were admitted in the Infectious Diseases Clinic of Arad and Timisoara during a period of 5 years, from July 2004 to July 2009. The retrospective study used clinical data. The diffusimetric antibiotic test was performed according to the existing standards at the moment. The antibacterial drugs most frequently used in the antibiotic sensitivity testing were selected: Ampicillin, Ampicillin + Sulbactam, Amoxicillin + Clavulanic Acid, Cephalosporins, Gentamicin, Colimycin, Chloramphenicol, Tetracycline, Co-trimoxazole, Nalidixic Acid, Fluoroquinolones and Nitrofurantoin. **Results:** The Salmonella strains developed a high sensitivity of 91.6% for Fluoroquinolones and a medium sensitivity of 40.6% for Cephalosporins. Furthermore, an important decrease of sensitivity was noticed for Ampicillin (0,6 %), Tetracycline (1,3 %), Colimycin (27,1%) and Co-trimoxazole (31 %). For our group, the following values of antibiotic resistance of Shigella were obtained: 53.1% for Ampicillin, 38,7 % for Co-trimoxazole, 32,3 % for Tetracycline and 31 % for Chloramphenicol. **Conclusions:** 1 The Fluoroquinolones have the maximum therapeutic benefit. 2 It is necessary to stop using the antibiotics which induce high resistance (Ampicillin, Co-trimoxazole, Tetracycline and Chloramphenicol). 3 The

increase of the antibiotic resistance of the Shigella strains in the West of the country is an alarming phenomenon

Keywords: antibioticsensitivity, Salmonella, diarrhoea, children

Mushroom intoxication in children – a diagnosis challenge

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Background. Mushroom poisoning remains a health problem in Romania. The non-specific symptoms and an incomplete anamnesis could lead to errors in diagnosis, thus delaying the specific therapy. **First case report.** A 4 year old boy, from a rural area, undergoing treatment with inhaled corticosteroids and leukotriene inhibitors for asthma, presents dizziness, headache, confusion and excessive sweating. The child is hospitalized with a presumed diagnosis of encephalitis or a clinical state induced by the side effects of his chronic treatment. An in-depth anamnesis reveals the ingestion of forest mushrooms, 2 hours prior to the symptoms, as well as the presence of less evident neurological signs in two family members who have consumed the same mushrooms (*Inocyba fastigiata* type). **Second case report.** A 15 year old girl, from a rural area, is urgently admitted to hospital with persistent headache, severe vomiting, confusion and cranio-cerebral trauma from falling. The presumed diagnosis is a cerebral hematoma, but the MRI scan is normal. Shortly, watery stools occur and the clinical evolution deteriorates, with the onset of hepatorenal failure within a few days. Re-evaluating the anamnesis, a history of mushroom ingestion 12 hours prior to the symptoms is revealed. The final diagnosis is mushroom intoxication, of *Gyromitra* type. **Conclusions.** The diagnosis of mushroom intoxication should be considered in the case of neurological and digestive symptoms in children from rural area, especially in the rainy season.

Keywords: mushroom intoxication, child, diagnosis.

Small bowel sarcoma with massive hemochezia and hemorrhagic shock

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Background. Small bowel tumors a rare and difficult to diagnose pathological entities. They are clinically manifested usually by haemorrhage or occlusion. Ultrasound, computer tomography and magnetic resonance imaging are useful diagnostic tools in these cases. Surgery is the best therapeutic choice in small bowel tumors, consisting in segmental resection and anastomosis, respecting the oncologic desiderates. Case presentation. We studied the case of a 72 years old women that was admitted in the emergency room with a massive exteriorization of dark red stool and signs of incipient hemorrhagic shock. She was taken in intensive care unit and, after hemodynamic equilibration and transfusions, we began the investigations. Gastroduodenoscopy and rectocolonoscopy did not localize the bleeding source. Ultrasound examination revealed an intestinal tipe tumor in the middle abdominal region. We performed the laparotomy and we discover an ileon hemorrhagic tumor that was extraluminally developed and communicate with the intestinal lumen by a small orifice. Segmental resection was made with terminal anastomosis. The histopathology reveals a sarcoma. The evolution was favorable and the patient went home on the 11th day. Discussions. Small bowel sarcoma is a rare condition and, as it was in this case, often diagnosed only when complications occur. Endoscopy did not establish the bleeding source but it was necessary to exclude rectal or colonic haemorrhage. Anyway ultrasound or, even better, computer tomography are used to reveal the tumor. Surgery must be performed with no delay because of haemorrhagic shock menace. Large segmental bowel resection offers a good oncologic solution. Conclusion. The management of small bowel tumors rise diagnostic difficulties that can be surpassed by ultrasound or computer tomography examination. Surgery is usually effective and must be applied in time. Radical resections are feasible in most cases and the short time recovery chances are good.

Keywords: small bowel sarcoma, hemochezia, segmental resection

Cytoarhitectonic modifications emphasized using morfological and histochemical metods in usual placental leasures

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Introduction. The last 10 years studies regarding the morphological architecture modifications at placental level prove that placenta is not a simple embryonic temporary annex, but a viscera which contains a lot of information sometimes obscure, responsible of malformations pathology or early born. The investigation of this organ is important at macroscopic level as well as microscopic for the purpose of differentiating the usual modifications from the extreme ones. Material and method. The placental morphology is usually studied using the bycrom hematoxylin eosin coloration. After the identification of areas with citoarhitectonical modifications as well as the formation of accumulation of pathological substances we can use special coloration like histochemical coloration techniques. The study group included 87 placentas provided from normal births with immature fetuses and presenting different developmental disorders. The study fragments were evaluated macroscopically and the microscopic study was made on histological section colored HE, as well as sections with the histochemical coloration PAS. This last method is elective for highlighting the fibrinoid. Results and discussions. The cases selected in the study group prove the presence of placental leisure, which in tis case could offer the backbone of a staging of the placental deficiency considering the number of lesions which were groped in three grades regardin the severity (light, medium and severe). The studies using histo-chemical coloring methods prove the necessity of deepening the microscopic methods and suggest the using of others with maximum accuracy (IHC) Conclusions. The presence of placental lesions and their observation through these methods suggests the intervention of the placental factor in pathogenic chain of developing and untimely born, fact that impose the necessity of carefully study of this transient organ through macro and microscopic methods.

Keywords: placental leasures, citoarhitectonical modifications ,histochemical coloration techniques

Cold agglutinine disease, case report

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This paper aims to present a case that belongs to a rare hematological disease, the cold agglutinine disease. There are two forms of cold agglutinin disease: 1-primary and 2-secondary. Secondary cold agglutinin disease is a result of an underlying condition. The patient presented was followed in the Hematology Clinic of Arad from January 2011. It is a condition that is diagnosed clinically and paraclinically relatively easy, but its etiology, within the secondary form, is difficult to assess. Individuals with cold agglutinin disease present with signs and symptoms of hemolytic anemia. The cause of this complex disease requires interdisciplinary collaboration because of the possible side appearance in some infectious, immunologically or neoplastic diseases. Patient's evolution was observed within three months from the onset of the disease, with a clinically stationary evolution, but with further investigation of the possible underlying causes, considering the autoimmune diseases, hematological neoplasias, infectious diseases.

Keywords: cold agglutinins

Therapeutical aspects in chronic hepatitis B

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The indication of treatment in HBe Ag positive chronic hepatitis B and in HBe Ag negative chronic hepatitis B is established after the evaluation of three criteria: DNA-HBV level, aminotransferase level and histological staging. Therapeutical strategy in chronic hepatitis B is determined by each particular case. Recommended first-line drugs are Peginterferon, Entecavir and Tenofovir. Finite therapy with Peginterferon is effective for the patients with A and B genotype, but the results in the cases of patients with D genotype are worse. Nucleoside/nucleotide analogs have minimal adverse effects but they develop resistance over time. The duration of treatment with nucleoside/nucleotide analogs is now unclear to the HBeAg negative chronic hepatitis B. The treatment with analogs in HBeAg positive chronic hepatitis B must be maintained at least another six months (preferably twelve months) at the time of seroconversion. The aim of antiviral therapy is to obtain a sustained immune control (loss of the HBeAg),

sustained suppression of DNA-HBV, appearance of anti-HBs antibodies and extremely low levels of ccc DNA (under 0,002 copies/hepatocyte) . A combination of either Peginterferon and analogs or two analogs is suggested as a future possibility.

Keywords: Nucleoside/nucleotide analogs, Peginterferon

Metabolic bone assessment in patients with inflammatory bowel disease

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BACKGROUND: patients with Crohn's disease and ulcerative colitis are at risk for bone demineralization. To study the metabolic bone status of these patients, a cross-sectional study was conducted. **METHODS:** 28 patients with Crohn's disease and 34 patients with ulcerative colitis underwent clinical, dietary, and spine radiological assessments. Bone metabolism was assessed by measuring serum levels of calcium, phosphate, parathyroid hormone, 25-hydroxyvitamin D3, 1,25-dihydroxyvitamin D3, and osteocalcin. Lumbar and femoral neck bone mineral densities were measured by dual energy X-ray absorptiometry (DEXA). **RESULTS:** Patients with Crohn's disease: serum osteocalcin level was decreased in 10 patients (35,7%), 2 of whom had never undergone steroid therapy. The other biochemical markers of bone metabolism were in the normal range. 13 patients (46,4%) had osteopenia, and 2 patients (7,14%) had vertebral crush fractures. No patient had clinical or biological signs of osteomalacia. 15 patients (53,57%) have decreased bone density, 2 patients (13,33%) not received steroids. Patients with ulcerative colitis: serum osteocalcin level was decreased in 3 patients (8,82%), all patients received steroid therapy. The other biochemical markers of bone metabolism were in the normal range. 5 patients (14,7%) had osteopenia, and 2 patients (5,88%) had vertebral crush fractures. 3 patients (8,82%) have decreased bone density, all patients received steroids. **CONCLUSION:** The results suggest that bone turnover in Crohn's disease is characterized by low bone formation in the presence of normal levels of calcium-regulating hormones. Analysis of bone density (DEXA) showed a significant correlation with age, cumulative corticosteroid doses, sedimentation rate, and osteocalcin level. It is a direct effect of circulating proinflammatory cytokines on bone osteoclast activity. Receive frequent

courses of steroids decreased bone density. Patients with ulcerative colitis have low increased risk of bone demineralization.

Keywords: inflammatory bowel diseases, bone density, steroids

Articular manifestations in Inflammatory Bowel Diseases

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Inflammatory bowel diseases (IBD) can be considered to be systemic diseases since they are often associated with extraintestinal manifestations, complications, and other autoimmune disorders. The organ system can be involved is: eyes, skin, joints, kidneys, liver and biliary tracts, vascular system. Inflammatory arthropathies are the most common extraintestinal manifestations in IBD patients with a prevalence ranging between 8% and 20%. Articular and musculoskeletal manifestations are included in the spondyloarthropathies (SpAs) that are a group of seronegative autoimmune related disorders with common characteristics including: ankylosing spondylitis, reactive arthritis, psoriatic arthritis, inflammatory bowel disease, some forms of juvenile arthritis and acute anterior uveitis. Articular involvement (peripheral or axial) can precede, be synchronous or begin afterward the diagnosis of IBD, it is characteristically pauciarticular, asymmetrical, transitory, migrating, prevalently non deforming. The axial involvement can vary from asymptomatic sacroileitis to inflammatory lower back pain to ankylosing spondylitis (that occurs in 2% of IBD patients). Conventional treatment of inflamed joints include nonsteroidal anti-inflammatory drugs and cyclooxygenase-2-inhibitor that should be used for short-term period because of gastrointestinal side effect and IBD reactivation risk nevertheless at drug suspension articular relapse can occur. Also local intra-articular steroid treatment can be useful. Sulfasalazine has been shown to be effective in peripheral joint disease in SpAs patients and positive but limited results have been obtained with methotrexate. Infliximab has shown efficacy in the treatment of SpAs in IBD patients as induction and maintenance therapy, also in the absence of acute phase reactants and intestinal activity.

Keywords: inflammatory bowel diseases, ankylosing spondylitis, reactive arthritis

Cutaneous aspects of chronic venous insufficiency

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Chronic venous insufficiency is caused by inadequate function of the peripheral veins. The equilibrium between tissue requirements and the amount of blood returning to the heart is not guaranteed, either in an orthostatic position or lying down. However, chronic venous insufficiency does not simply involve the patency of the veins and the condition of their walls and valves (vascular factor) but includes any other cause that might affect venous return, such as muscle pump action in the feet, calves and thighs or changes in joint mobility and connective tissue (extravascular factors). A distinction must also be made between insufficiency of the superficial venous system and insufficiency of the deep venous system, or of both. The key to recognising the subjective and objective signs of chronic venous insufficiency is local or diffuse venous hypertension with rheologic repercussions on the macrocirculation and microcirculation, leading to the characteristic edema. These signs are valid at both the physiopathological and clinical levels. The acquired or congenital pathological process causing chronic venous insufficiency (angiodyplasia, valvular insufficiency or agenesis) can be functional or organic, the latter being more common but usually less severe. Objective of clinical examination was an analysis of clinical signs of chronic venous insufficiency. Material and methods: We studied a total of 120 patients with chronic venous insufficiency old history in which 41 were male, mean age of 56.19 years and 79 were females with a mean age of 62.73 years, mean age the lot being 60.50 years. We noticed the large number of patients with varicose veins. The large number of them, whether they are primitive or secondary posttrombotic process, demonstrates the evolution toward a severe form of chronic venous insufficiency. Most patients with an average age of 60 years, shows clinical signs of severe chronic venous insufficiency with severe trophic disorders. Clinical symptoms observed in the study group in decreasing order were: pigmentation and purpuric dermatitis, edema, lipodermatosclerosis, corona phlebectatica, chronic venous ulcers, venous eczema, atrophy.

Keywords: chronic venous insufficiency, vascular factor, extravascular factors, edema

Morphological and histopatological changes in the chronic pancreatitis

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This study represents a prospective / retrospective interdisciplinary international trial regarding chronic pancreatitis. It was conducted along a 7 years period in 3 Universities of Medicine (Arad – Romania, Timișoara – Romania and Chișinău – Moldova). The results are based on clinical parameters of 105 patients with chronic pancreatitis with mean 53% of the whole lot of 198 patients admitted for surgery in our departments. The distribution of populational features are statistically homogenous among lots; the age ranged between 17- 65 years ; mean age was 45 years. We found diffuse or condensed inflammatory reaction in perivascular and periductal spaces in 81, 5% of bioptic probes. Concomitantly, alongside dystrophic intracellular modifications we noticed destructive disorders of the acinar basal membrane and of the cellular membranes. In the case of chronic pancreatic infection, the following histopathologic peculiarities of structural modifications were found: • the process of atrophy of the acinar parenchyma • the substitution fibrosis (vessels with narrow coherent lumen), intravascular fibrosis with or without intraacinar sclerosis • the hypertrophy of nerve fibers, modifications which explain the contiguous pain syndrome.

Keywords: chronic pancreatitis, histopathological features

Clinical and epidemiological considerations and cytological examination of bronchial- lung cancer detected by bronchoscopy examination.

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Introduction: Pulmonary cancer permanently continues to be a reality of the medical practice. Lately, the numerous cases make us believe in a recrudescence of

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this disease, determined by the stronger and numerous noxa agents, so of the risk factors, out of which smoking is at the forefront. Objectives: The study was performed to detect bronchial- lung cancer. Material and method: The study has been made on a number of 545 patients in the Pneumophysiology Clinic of the Hospital Emergency Clinic Arad in 2010 to detect bronchial- lung cancer. Of these 395 patients were male and 152 were women. The diagnosis has been put on an adequate number of smears out of sputum. We have also made the cytological exam on the aspirate and/or on the bronchial enema, with or without brushing, harvested during the bronchoscopic exam out of which enema were made. All the smears, both from the sputum and from the bronchial aspirate, have been colored using the May-Grünwald –Giemsa (MGG) technique. We have also made bronchial brushing where it was possible. The smear from the bronchial brushing has also been colored with MGG. Results: Regarding age, CBP was more frequent after 50 years with a maximum age group of 60-69 years, which is consistent with the literature. Bronchial- lung neoplasms was less than 39 years and rarely appeared in approximately 75% of cases 5 and 6 age decades. Of all patients studied in 190 patients came cytology positive, male / female ratio being 1.92 / 1. 24 cytology-positive patients were found to have pulmonary tuberculosis and associated. Cytological analysis of the various products collected (bronchial aspirate, bronchial microlavaj, bronchoalveolar lavage, bronchial broșaj, sputum examination) showed malignant cells with certain characters, origin: • squamous: with cheratinizare (cells with red cytoplasm) and without cheratinizare (cells with blue cytoplasm); • glandular: elongated cell with the nucleus periphery, secret or unclassified. Conclusions: This examination raised the suspicion of CBP cytological confirmation of the diagnosis requires pathologic examination. Cytological diagnosis is necessary to buy time for healing the patient. This study certifying that lung neoplasm morbidity in Arad county ranks first in our country.

Keywords: bronchial- lung cancer; bronchoscopic exam

Recurrence in anal fistula surgery

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Background. Anal fistula cure is a balance between the eradication of the sepsis and the preserving of normal anal sphincter continence function. The main surgical procedure is fistulotomy but the specific technique depends on the height of the fistula in relation to the anal sphincteric system. The risk of incontinence after surgery explains the growing interest in sphincter sparing techniques such as the mucosal advancement flap, the plug procedure and the injection of fibrin glue. Anyway, results of these procedures are not yet good enough and needs further development. High and complex anal fistulas best option for surgical procedure is still uncertain. **Material and methods.** We expose our own medium and long term results following surgical treatment of 110 cases of anal fistula. **Results.** We performed 42 (38 %) fistulotomies, 26 (24%) fistulectomies, 7 (6%) silvestri sphincterotomies and 35(32%) combined interventions. 54 patients (49%) developed relapses of fistula. **Discussions.** Based on our results and literature reviews, we conclude that recurrences depend on both anatomoclinic factors (distance from anus, perirectal palpable masses, fistulographic complexity, number of relapses) and intraoperative ones (anal continence, the length and complexity of fistula, type of intervention). **Conclusion.** We consider that relapse rate for anal fistula goes to about 49% of primitive and recurrent cases too, and also that surgery remains a basic option in anal fistula treatment.

Keywords: anal fistula, recurrence

The arteriovenous surgical Cimino-Brescia fistulas - precocious postoperative complications

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Introduction. Patients with advanced renal failure benefit of the arteriovenous Cimino-Brescia fistulas (FAV), which are excellent tolerated for a long time. The main postoperative problem is maintaining their functionality. The most frequent precocious postoperative complications of FAV are represented by subcutaneous hematomas, major bleedings exteriorized through the wound, skin necrosis and venous thrombosis. **Material and method.** We studied a group of 153 patients operated with Cimino fistulas. **Results.** Regarding the complications, there were 19 cases(12.41%) with significant subcutaneous hematomas, 12 cases (7.84%)

with precocious thrombosis of the the fistula and 11 cases(7.18%) with major bleedings externalized through postoperative wound. Reduced skin necrosis were present in 41 patients (26.62%) but the rate decreased significantly after changing large curved incision in a small longitudinal one. In 129 cases (84.31%) FAV functioned normally. There were necessary 14 (9.15 %) reinterventions, from which 6 (3.92%) were earlier. **Discussion.** Major bleeding require a pressure dressing, which, however, involves the risk of reducing the flow through the venous arm of the FAV. Massive hematomas can compress FAV and stop it also, so their drainage is necessary. An important aspect is the lost blood volume, which, taken together, may be a generator of a hemorrhagic shock, especially at the anemic patients. **Conclusions.** The FAV precocious postoperative complications can be redoubtable with the possibility of compromising the entire surgical act by shutting the FAV . Therefore their prevention is necessary by intraoperating measures aiming a thorough haemostasis, reduced tissue dissections and the use of longitudinal incisions as small as possible. The drainage of the big hematomas and the precocious reinterventions are required when the FAV is endangered..

Keywords: arterio-venous Cimino fistula , early postoperative complications

Intraoperative incidents in Cimino-Brescia surgical arteriovenous fistulas

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Introduction. Surgical Cimino Brescia arteriovenous fistulas (FAV) offer optimum conditions for performing hemodialysis at patients with advanced renal failure. **Materials and method.** We studied a group of 153 patients operated with FAV . **Results.** The intraoperative difficulties were the following : small calibre veins in 31 cases (20.26%), atheromatous artery in 17 cases (11.11%), major bleeding transe anastomosis in 6 cases (3.92%), venous bleeding by punctiform lesion in 6 cases (3.92%), venous bleeding from skid ligation of collateral in 3 cases (1.96%). In 12 cases, the venous flow was unsatisfactory. **Discussions.** The finding of small caliber veins is a quite frequent incident and compels the operator to a thoughtful consideration about the opportunity of proceeding the operation. If it continues, it will require a meticulous perivenous dissection to allow

the vein dilatation. If the vein's punctiform lesion intervenes, it will be compressed lightly for a few minutes. Large lesions lead to the abandonment of the vein, because its suture is not indicated. Radial artery atheromatosis, frequent on diabetics, rises difficulties in realizing the anastomosis, with the risk of detachment of an atheroma plaque. The unsatisfactory venous flow induces a absent or uncertain functionality of FAV, situation in which the anastomosis may be re-done or it may be renounced. Anastomosis' hemorrhage trance is usually stopped by gentle compression over the skin, the putting of an extra nonstenosing wire is rarely needed. Conclusions. Intraoperative incidents and difficulties in FAV are most often consequence of poor quality of vein and artery, requiring a careful evaluation of their ability to be used for FAV and special technical precautions. The minor bleeding incidents are usually solved by compression, rarely by supplementation of an extra nonstenosing wire, but major bleeding on vein compromise the FAV.

Keywords: Cimino arteriovenous fistula, intraoperative incidents

Surgery of acute calculous cholecystitis - laparoscopic or open procedure ?

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Background. Laparoscopic colecystectomy has become the routine operation in chronic calculous cholecystitis and ,excepting the sclero-atrophic form, usually there are not very important problems in most of these cases. Talking about acute cholecystitis , the situation changes. Beginning with the often tight adhesions between gallbladder and neighbour organs, continuing with difficult manipulation of a distended cholecist that might needs puncture and finishing with a small cystic duct there are plenty of problems for the surgeon. Material. We studied a number of 978 laparoscopic cholecystectomies performed at acute cases. Discussions. If we can clearly identify the cystic duct than we can go on laparoscopically. If not , the conversion to open procedure must be done with no delay. So the key time of the laparoscopic colecistectomy is the dissection of the Callot triangle. This needs to be done extremely careful, starting from the infundibule-cystic junction, identifying the main anatomic elements and advancing carefully towards the choledocus. At this level, the main trap is coming too close to the main billiary duct and and to injure it. Once this phase is past, there is the danger of

premature relaxation which can cause cauterization injuries of other organs. The perforation of the cholecyst is usually a minor injury, but one that can become a determining factor of conversion if we lose to many calculi in the peritoneal cavity. Conclusion. The laparoscopic procedure is feasible in acute cholecystitis, not only in chronic ones, but needs experienced surgical hands. The dissection of the Callot triangle is the capital operating phase that decide the way to go on. Last but not least, one of the fiercest traps that the surgeon might fall into is his own pride, which must not prevent him from deciding to choose the conversion when the safety of the patient requires it.

Keywords: acute calculous cholecystitis, laparoscopic procedure

TAKOTSUBO Cardiomyopathy : Case Presentation

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INTRODUCTION: Takotsubo cardiomyopathy is an acute cardiac syndrome characterized by transient kinetic abnormalities of left ventricular (apical aspect of inflation), chest pain or dyspnea, ST elevation and raise of cardiac enzymes. Presenting the case: A patient of 65 years is an emergency for intense chest pain, prolonged (4 hours onset), due a psychological stress (death of husband). The admission electrocardiogram showed ST segment elevation in leads precordial (V2-V6) was raised troponin, and echocardiography revealed apical akinesia. Thrombolytic is administered and after the pain resolves, the ECG shows giant negative T waves in leads DII, aVF, V2-V6, which further diminishes the amplitude. On 7 days echocardiography confirm remission of kinetic disorder. At 10 days after admission coronary angiography is performed that shows coronary free. Conclusions: Takotsubo cardiomyopathy is a relatively rare disease that is triggered by an acute stress, especially in postmenopausal women. This case is a typical example of stress-induced cardiomyopathy in a woman of 65 years.

Keywords: cardiomyopathy, TAKOTSUBO

Paraoxonase – implication in atherogenesis. Genetical aspects

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Paraoxonases (PON) are ester hydrolases that link to HDL cholesterol and act to accelerate the hydrolysis of a number of organic esters as protecting HDL cholesterol oxidation. The three family members of Paraoxonase are PON1, PON2, PON3 with similar structural properties and enzymatic activity, including the ability to hydrolyze oxidized lipids in LDLc. PON1 - serum Paraoxonase is the main enzyme that confers antioxidant properties of high density lipoproteins – HDL and it is responsible for the mechanism by which it inhibits oxidation of LDL-cholesterol and HDL-cholesterol. It is a calcium-dependent enzyme capable of hydrolyzing oxidized phospholipids and fatty acids to reduce the accumulation of oxidized lipids in LDL. Some of recent studies shows that PON 1 is involved in inflammation that when there are liver diseases PON1 serum level is low. The amount of low serum PON1 is always correlated with an increased risk of coronary heart disease, myocardial infarction and carotid atherosclerosis. The activity of Serum Paraoxonase (PON1) is influenced by genetic factors (PON polymorphisms) and acquired factors.

Keywords: paraoxonases, HDL-cholesterol, serum paraoxonase (PON1).

Genetics of venous thromboembolism

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Thrombosis of superficial veins (as occurring in varicosities) is benign and self-limiting but thrombosis of deep vein is a serious condition. Localized thrombi in the deep veins are less serious than those involving the proximal veins (popliteal, femoral or iliac veins) because they are often smaller and therefore less commonly associated with long term disability or clinically important pulmonary embolism (PE). Clinical diagnosis of venous thrombosis in symptomatic patients lacks both sensitivity and specificity. It is insensitive because many potentially dangerous thrombi do not totally obstruct the veins nor produce inflammation of the vessel wall and therefore produce minimal clinical manifestations. It is non-specific because none of the signs and symptoms is unique to this condition.

Keywords: venous thromboembolism, VTE, thrombosis, DVT, Homan sign.

Aspects regarding the importance of imaging methods of neoplasm of the *cervix uteri*

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Introduction. The malign tumor pathology of the cervix uteri is among the first morbidity and mortality causes of the women together with the breast cancer, pulmonary cancer and colon cancer, in our country. Even with the screening test Babes Papanicolau (PAP) with is a non invasive method, the adresability of the femal population is low so that the diagnostic of cervix uteri cancers is done in advanced stages. This situaton needs a complex terapeutical behavior and an imaging control to further monitoring. Material and method.The study shows imaging examinations of patients suspicious of malign tumors starting from the cervix uteri. The study group was 116 patients which were investigated through the following: general and pelvic ultrasound, computer tomography(CT) and magnetic resonance imaging (MRI). Radio-imagistic exams are very important because the show the tumor extension and the secondary distance findings. Imagistic methods represent an optimum way to evaluate the main factors of prognostic and selection of the therapeutic strategy. Results and discutions. Imaging methods represent an optimum way of evaluating the most important prognostic factors such as adiacent, regional and far ganglinary stations invasions and also visceral and somatic modifications. Also these imaging methods allow a selection of the therapeutic strategy its the timing, and initiatin. Conclusions. . None of the radio-imagistic methods cannot establish the type of the cervix uteri neoplasm; this can be done only by pathology exam so the necessity of interdisciplinary cooperation.

Keywords: imagistic methods, cervical carcinomas, therapeutic strategy

Hematological challenge in some cases followed in the Hematology Clinic of Arad

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This paper aims to evaluate the cases of four patients hospitalized and treated in the Hematology Clinic of Arad, in the period between January and March 2011, cases that were not presented with the standard diagnostic criteria, thus requiring a more complex approach by the team of Hematology Clinic of Arad. Haematological diagnosis usually fit strict criteria, standardized internationally, but there are cases to be dealt with a detective rigor, because of the lack of some pathological criteria or the presence of other elements that do not fit into that pathology. Thus, one of the cases presented had a time of onset of the disease much longer than what the literature states in the field, another case was inconclusive concerning the positive diagnosis by specific investigations, which could lead to confusion diagnose. Another patient presented a special and rare subtype of a hematological disease, the diagnose was made possible only by a special investigation. The last patient had an unusual form of a hematological disease, the diagnose was put only after performing a special investigation and with the observation of the evolution of the patient. The paper evaluates these cases and present diagnostic and treatment options applied by the team form the Hematology Clinic of Arad.

Keywords: hematological, positive diagnosis

Lyme Borreliosis – an underdiagnosed and mistreated disease

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Lyme borreliosis was named after the town of Old Lyme, Connecticut, USA, where the disease was discovered after investigations for an outburst of juvenile rheumatoid arthritis in the 1970's. The disease is widespread in the United States of America, but is found also in Europe, with an increasing number of reported cases in Romania too. Lyme borreliosis is a tick-borne infection, the Ixodes ricinus tick being the vector that transmits a gram-negative spirochaete called *Borrelia burgdorferi*. This pathogen causes a multi-system disorder that can affect the joints, the skin, the heart and

the nervous system. The infection can be initially asymptomatic in up to 40% of cases and, thus the diagnosis is easily overlooked or discovered at a later stage. The treatment for Lyme borreliosis is controversial – mainly antibiotic in the early stages, but it can involve long-term management with high doses of antibiotics in later stages. What starts as a simple bite by a tick can turn into a crippling illness. There are three stages of Lyme borreliosis: early localized (erythema migrans), the early disseminated (manifestations including facial palsy, aseptic meningitis, arthritis with effusion and carditis) and late stage borreliosis – uncommon, but it occurs in patients that have been treated inadequately. This complex pathology has caused Lyme borreliosis to be also called "the illness with a thousand faces". This paper is an overview of Lyme borreliosis, emphasizing epidemiology, laboratory screening, diagnosis and prevention. It is meant as a means of raising awareness about a disease that does occur in Arad county and that should be taken into account, especially by health care professionals in primary care, emergency and infectious diseases departments. A case study of Lyme borreliosis is also included in the presentation.

Keywords: infection, tick, borreliosis, erythema migrans, prevention

SECTION III – Complementary in aesthetics and prevention in Dental Medicine

ORAL PRESENTATIONS

Bisphosphonates – related osteonecrosis and potential risk factors

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Bisphosphonates are an important class of drugs that are used in the treatment of metabolic and oncologic diseases of the skeletal system. Their efficacy in the treatment and palliative care of the patient with metabolic and oncologic diseases of the skeletal system is indisputable. However, since 2003, the use of intravenous bisphosphonates therapy as well as the use of prolonged oral bisphosphonates therapy has been linked with the development of osteonecrosis of the jaw. Osteonecrosis of the jaw (ONJ) is a severe bone disease that affects the jaws, including the maxilla and the mandible. Damage and death to areas of jaw bone is caused by impaired blood supply to the bone, but it is not always clear what causes that impairment. While no causal relationship between bisphosphonate use and ONJ has not been established, several potential risk factors have been identified. These potential risk factors for the development of bisphosphonates-related osteonecrosis of the jaw (BRONJ) can be grouped as: drug-related risk factors (potency of the particular bisphosphonates and duration of therapy), local risk factors (dentoalveolar surgery, local anatomy, concomitant oral disease) and systemic factors (cancer, vascular disorders, corticotherapy, coagulopathies, alcohol abuse). Since there are no diagnostic tests to determine the development of BRONJ and there are no effective treatments for bisphosphonate-associated bone lesions, it is mandatory to aware of the risk factors and to take preventive actions.

Keywords: bisphosphonates, osteonecrosis, causal relationship, risk factors, preventive actions

PROCERA ALL-CERAM- full ceramic system (theoretical and clinical aspects)

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Prosthetic restorations of metal alloy infrastructure plated with aesthetic materials (composite resins, ceramics) are

still widely used as treatment solutions in oral rehabilitation of the majority of edentulous patients. The current aesthetics needs along with technological progress have allowed us to step into a new era of fixed prosthetic restorations without metal support, so-called "full ceramic systems." Our study focuses on working on full ceramic restorations by PROCERA All-Ceram system; this system introduce a hole new concept in the field of dentistry. Seeing there it is a fairly new system in Romania, mainly unaccessible both to dentists and patients due to it's complex technology and high costs,our initiative aims to set the theoretical bases and clinical aspects of PROCERA All-Ceram. Full ceramic restorations are biological and more aesthetic al than any other type of prosthetic restoration. PROCERA All-Ceram combines excellent resistance with one of the highest aesthetic level ever achieved in dentistry. This benefit is also related with the preparation phases of the prosthetic field,imprinting, cementation and so on. By rigorously following these steps one will have high predictibility in obtaining excellent aesthetic results, thus making the process of obtaining a full ceramic restoration a simple and safe procedure, wich would become any dentist's daily used manoevre.

Keywords: procera, aesthetics, full ceramic

Theoretical and practical studies on using zirconium oxide restorations in posterior regions of the mouth

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One of the most difficult areas of dentistry today is the restoration of dental structures with biocompatible materials wich would be strong enough to withstand masticatory forces. In recent years we have experienced major changes, both in restorative dentistry as well as in that of dental technology, passing gradually from the classical solutions to the most advanced technologies. Patients can now choose a material that is esthetic, strong, pure, biocompatible and is suitable for restoring the integrity of dental arches in the sides, which is zirconium oxide. With a proven history of over 15 years, as a framework material for dental restorations, it is the first material that can be used successfully for large dental bridges in molar region. The fact that Zirconia restorations are made only by milling computerized industrial devices (CAD / CAM), should be taken into consideration during preparation of dental abutment. Because the computer does not support design approximation, it is mandatory that the imprinting is of

excellent quality and it is also essential that the finish lines of dental abutments are highly precise, without which one can not obtain a good quality prosthetic restoration. Our work aims to detail specific aspects of clinical phases necessary to obtain a properly prepared tooth stump, but also those related to technical data useful to improve the aesthetic performance, but not at the expense of mechanical properties of a zirconia restoration in posterior regions.

Keywords: zirconium oxide, full ceramic, posterior region

20 years of direct composite veneering

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When consulting a dentist, many patients present stained teeth, white spot lesions, deep cracks, chippings, dental abnormalities in shape, volume and position, etc. Not so long ago, all these problems were treated by using crowns, which is not a biological mean and a time consuming method of treatment. Nowadays, patients being more aware than before of technical progress, also become more demanding, as far as dental solutions go. They are no longer willing to compromise asking not only for aesthetic results but also for rapid treatments. Trying to meet these needs, today's dentists use minimally invasive treatments to solve this kind of dental inconveniences, such as: external bleachings, direct and indirect veneering. This means are biological due to the fact that they are less dental tissue consumers. Veneering can be done directly by the dentist in his office or indirectly by dental technicians, in their laboratories. Should the dentist do it himself directly in the office, the cost of this procedures are lower, making it a more agreeable method for the patient. Our work focuses on detailing this direct method of veneering, which has evolved because of 20 years worth of experience in working with composite materials of excellent aesthetic properties.

Keywords: veneers, aesthetic experience

The role impact of OPG investigation in dentistry

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In the daily work of a dentist there is one element without which we can not put a precise diagnostic or can not make or evaluate several dental treatments. This is the radiological investigation. He can refer to various aspects of TMA, regarding some parts of it or the hole system. In our paper we want to detail the role and importance of Romanian dental panoramic radiographs in clinical practice introduced in the past 15-20 years.

Keywords: OPG, radiology

The relevance of CT investigation in dentistry

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TVD was introduced in imagistic dental diagnostic arsenal in 1998, and in our country it felt present in the last 3-4 years. We salute its presence, and our study aims at making this exam a more accessible one. This investigation is less accessible to both patients and doctors because of high costs price and lack of experience in this field. Nonetheless we trust that with time it will become a tool used very often by dentists in their daily practice.

Keywords: radiology, imagistical investigation

Use of zirconium oxide ceramic restorations in aesthetic areas- theoretical and clinical aspects

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At the moment ceramic materials plated on metal substrate have become common treatment solutions in prosthodontics; but always striving for the better, full ceramic restorations have emerged, thus making it possible to take a step further by perfecting their aesthetic, biological and mechanical qualities. We can not deny the importance of metal in the evolution of dental technology and we would also be wrong to deny its current decisive importance in some cases; none the less

we must meet our time and acknowledge zirconium as "the pride" of today's prosthodontics. Its qualities are second only by those of high-end glass ceramics. Medical progress in dental technology spread worldwide recommend therefore the replacement of metal infrastructure, completely unattractive, with one that's highly aesthetic but also biocompatible, which is zirconium oxide. Full ceramic restorations have been used for several decades to achieve the natural look of fixed dentures, but because of their superior biocompatibility, as well as mechanical and aesthetic qualities, ceramic zirconium oxide restorations have become more important in restoring dental arches throughout prosthetic crowns and bridges in all areas of the oral cavity. In the current context of patients growing desire to receive stronger and more aesthetic restorations, zirconium oxide has become first option for dental crowns. Zirconium oxide is a very resistant material, appreciated both by doctors and patients. Following this ascendent trend of full ceramic restorations, in our paper we have studied the behavior of fixed prosthetic restorations made of ceramic zirconium oxide, comparing the excellent qualities of this material with its shortcomings, in terms of aesthetic performance in frontal area of the mouth.

Keywords: zirconium oxide, aesthetic, frontal area

The psycholocial implications of mobile denture acceptances

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The aim of this article is to discuss a series of psycholocial social and individual factors which may influence the decisions regarding the needs of treatment, confirming this way, the necessity of social approach, as well as, of the decision taking process based on reality in prosthodontics dentistry. Traditionally, the decision on treatment options and the choice of types of prosthetic treatment was professional practitioner responsibility. In clinical practice today, increasingly more patients take an active role in making treatment decisions on how and expressed wishes and expectations. Similarly, the new requirements arising from professional practice model based on reality, leading to the need for new approaches, effective and safe. The purpose of this article is to discuss a range of psychological, social and individual needs that influence decisions about treatment, confirming thus the need to address social and decision-

making based on reality in prosthetic dentistry. To justify the prosthetic treatment and be sure that it is beneficial to the patient's need to be established, there must be a motivated patient, the prosthesis must be properly designed, constructed and maintained. Partial denture-bearing patient satisfaction (acceptance prosthesis) will be much greater if patients are informed about the prosthesis purposes and use. Both dentist and patient should not expect them to be satisfied all the requirements of the prosthesis. Analysing the issues that concern him along on the patient and clinical outcomes predictable, allowing both dentist and patient to understand the benefits effects of partial denture.

Keywords: rehabilitation, efficient approach, availability, acceptability, accessibility.

Physicochemical considerations of composite filling materials

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Composite fillings previously were not as durable as amalgams. However, dental manufacturers have made great strides in improving the strength of composite resin materials, to the effect that composite fillings now have the potential to be used for all teeth, including molars. Furthermore, composite materials often require less tooth preparation and may not weaken the affected tooth as much as amalgam fillings, which often require more extensive tooth preparation. However, amalgam fillings do have a long-term track record and may last longer than composite fillings. Direct coronal composite restoration materials, currently are available in an extremely varied market so that practicing dentists can choose. Composition varies greatly from direct coronary composite restorative materials, from autopolymerization to photopolymerization, and within the latter from the conventional to hybrid nanocomposites. One my notice that between them there are different degrees of polymerization, depending on their composition. From a clinical point of view, their behavior in time, regarding the degree of shrinkage, wear, is influenced by the composition and properties of these materials

Keywords: photopolymerization, restoration materials, nanocomposites

Comparative evaluation of mixed metal-plastic dental crowns and the metal-ceramic ones

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In the mixed dental crown competition between polymers and ceramics, won the mixed dental crown, the metal polymer. This issue was relaunched in the '80s, when they sold new types of composite diacrylic resins, which can be used to manufacture the physiognomic components of mixed dental crowns. Their cost is lower than ceramics, while their simpler technology, their physical, mechanical and aesthetic properties, but especially their possibilities of chemical bonding of the alloys of composite diacrylic resins, updates the metal-polymer mixed dental crown. Currently there is fierce competition between the two possibilities of achieving a mixed dental crown. The mixed metal-plastic dental crowns have the advantage that the working time is lower compared to the mixed metal-ceramic dental crowns and does not require great skills and vast experience from the dental technician, has an affordable price compared to the mixed metal-ceramic dental crowns, but its disadvantages are in terms of color, which can not be depicted as in the metal-ceramic technology but also their resistance. Due to the complicated laboratory technology that requires a special equipment and because of material's costs, the metal-ceramic prostheses are more expensive than metal-diacrylic or metal-acrylic, but in terms of quality are much higher.

Keywords: dental crowns, diacrylic resins, polymer

Bisphosphonates and the risk of developing osteonecrosis of the jaw

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The Bisphosphonates are more frequently used in the treatment for osteoporosis, therefore we must be well informed about the risk of developing osteonecrosis of the jaw in these patients, even in the case of minor surgery. The preventive therapy conduct is very important. A rigorous anamnesis may prevent further complications. Originally named "Disphosphonates", the Bisphosphonates have been synthesized for the first time in Germany in 1865 and were used especially in the industry. Commercial names: - Alendronate (Fosamax) - Clodronate (Bonefos, Ostac) - Etidronate (Didronel) -

<http://www.jmedar.ro>

Ibandronate (Boniva) or - Pamidronat (Aredia) - Risedronate (Actonel) - Tiludronate (Skelid) - Zoledronate (Zometa). The Bisphosphonates are prescribed for osteoporosis and osteopenia (disease caused by the reduction of bone mineral density from the axial skeleton), Paget disease, malignant bone metastases, multiple myeloma, Myositis Ossificans, malignant hypercalcaemia. Although the Bisphosphonates are metabolically active in all the bones of the organism, the osteonecrosis process induced by the Bisphosphonates was described especially at jaw level. In the last few years over one thousand osteonecrosis of the jaw cases have been associated with the intravenous administration of Bisphosphonates with the first cases being reported in 2001. It seems that at the oral administration of Bisphosphonates, the latency period for the emergence of clinical signs of ONJ is longer than the one in which the administration was made through intravenous perfusion. The patients set to follow the Bisphosphonates treatment should be carefully monitored from the dental point of view. Equally important is the medicolegal climate, a correct data evidence being necessary. When the consent is requested for surgery at a patient which takes Bisphosphonates, the ONJ risk must be mentioned, regardless of its probability. The reference to a specialist surgeon is essential to assure the proper care.

Keywords: bisphosphonates, osteonecrosis of the jaw, osteoporosis, intravenous administration

Complete denture using injection – molded polymers techniques

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The denture base fracture is an unsolved problem nowadays and the most frequent cause of an acrylic complete denture failure. Although in many European countries the Social Services spend a big amount of money for denture repair, there are few studies concerning the fracture types and the etiology involved in these fractures. According to our clinical experience, the maxillary acrylic complete denture fractures occur more frequently. In the maxilla the denture base is larger and thinner than in the mandible. Polyacrylic polymer is useful for obtaining complete maxillary dentures, especially when heavy occlusal forces are involved. These prostheses will be intimately applied on the Ah zone. The content of residual monomer is low, being extremely important for the health of the stomatognathic system. The content in

residual monomer of thermoplastic injectable resin Polyan is low, 0,3%, compared to other thermopolymerized resins which content 2-4 % residual monomer. According to these results thermoplastic injectable resin Polyan is more compact, monomer free and suitable for long lasting dental treatments, comparing to other types of dental resins.

Keywords: resin, polymer, injection, Polyan, fracture, monomer, complete denture

Night bottle syndrome – clinical aspects and treatment

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This syndrome is a baby bottle tooth decay. This is a dental condition that occurs in children between 18 months and 3 years of age as a result of being given a bottle at bedtime, resulting in prolonged exposure of the teeth to milk or juice. Baby Bottle Syndrome is a devastating condition characterized by widespread decay of the primary dentition (baby teeth) and brought about by the practice of parents allowing infants and small children to fall asleep with a bottle containing a liquid that is either highly acidic or high in sugar content. Usually the front teeth are the first to be affected and they are affected as soon as they begin to erupt into the mouth. The first baby teeth may appear in infants as young as 2 or 3 months old so it is therefore recommended to avoid this practice no matter what age your child is. Although it is recommended that children not be put to sleep with a bottle of any kind, if they must have a bottle at night, it should contain nothing more than pure water, or some other liquid containing no sugar and that is neutral in pH. A very early sign of caries development is the beginnings of tooth demineralization, the slight penetration into tooth enamel, which is typically visualized by chalky white spots or lines. In this premature stage, white spots or lines can be reversible and caries progression can be avoided with proper care; fluoride application and diet changes are likely to be beneficial to the remineralization and protection of teeth. Further decay of the teeth from the enamel to the dentin is, obviously, more critical. Severe forms are characterized by anarchic location, onset of immune surfaces with simultaneous impairment of all dental groups, without observing a characteristic sequence, the rapid evolution in the surface and depth, which leads to early and rapid destruction of all teeth. The treatment of severe forms of

decays like nursing bottle caries presents more difficulties.

Keywords: baby bottle tooth decay, syndrome, rapid evolution

The Muhlemann and Son sulcus bleeding index reported to oral hygiene and periodontal disease

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The Muhlemann-Son Sulcus Bleeding Index - its evaluation as a practice-relevant method for early recognition of periodontopathies using comparative measurements of the partial pressure of oxygen in the capillaries of the gingiva. Any epidemiological survey of periodontal status requires that the state of the gingiva can be accurately defined, in order to be able to compare different population groups at a given time, to determine and control risk factors, and to assess treatment efficacy. Although the gingival index and sulcus bleeding index have been widely used as indicators of periodontal status, there is some disagreement among investigators as to their meaning and significance. A clinical study was undertaken to monitor the occurrence of gingival bleeding, oedema, and change in colour in subjects with and without periodontal disease, and it was found that the combinations of these clinical symptoms often did not correspond exactly with an index score. It is therefore suggested that any study of periodontal disease should be based on fundamental criteria, such as bleeding or oedema, rather than on composite indices. Tooth decay and periodontal injury, disease with a maximum prevalence of maxillary dental device, occurred in human since ancient times, but now have become a real health problem. Addressed until recently only in treatment terms of lesions present, now, due to an accumulation of important issues concerning etiology and pathogenesis of these diseases are required increasingly specifically methods of prevention and treatment of caries and periodontal disease. Bleeding of the gums, even during brushing is a sign of inflammation and the major marker of periodontal disease. In chronic periodontitis, the tooth supporting structures are destroyed. The disease has a multifactorial origin. Complexes of commensal oral anaerobic bacteria and perhaps viruses are thought to interact with risk factors, such as smoking, diabetes and depression, to create the conditions which make a person susceptible to periodontitis. The patient's immunoinflammatory response to the bacteria causes the tissue destruction which occurs in chronic periodontitis. It is

useful to distinguish chronic gingivitis from periodontitis. Chronic gingivitis is the very common inflammatory reaction occurring in the gingival tissues in response to the accumulation of dental plaque. It usually precedes the development of periodontitis, but chronic gingivitis does not inevitably progress to periodontitis. In this study we are proposing a clinical examination of marginal periodontium, gingival bleeding insisting on the presence and significance of this symptom in periodontal pathology.

Keywords: sulcus bleeding index, periodontopathies, gingival oedema

The influence of tensile strength on dental materials

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The tensile strength is one of the factors that influences the behavior of dental materials for direct coronal restoration. The obtained results are varied, depending on the dental material tested and it brings us additional information in selecting of our material for a particular type of crown restoration. The study compares the diametral tensile strength of seven dental restoration materials which includes resinbased composites and glass ionomer cements. The resinbased materials tested in this study are conventional, microfill composite materials (Filtek Z250 and Gradia) and nanocomposites (Filtek Ultimate and Premise) used as anterior and posterior restorative materials. The glass ionomer cements tested were conventional glass ionomer cements (such as Ketac Molar easy mix and Fuji IX) and resin-modified glass-ionomers (Vitremer). The study evaluates diametral tensile strength, submitting them to a test of diametral compression which is achieved by applying a constant mechanical force of 0.1mm/sec on diametric section of a composite material sample. While the composites (conventional, microfill or nanocomposites) tested in this study had diametral tensile strength superior to those of the glass ionomer cements, they were better suited for use as a posterior and anterior restorative material than glass ionomer cements. Results demonstrated that the conventional composites, Filtek Ultimate and Filtek Z250, had greater DTS than other resin-based composites such as Gradia and Premise and had significantly greater DTS than glass ionomer cements. The DTS were significantly greater for resin-modified glass-ionomers, Vitremer, than the conventional glass ionomer cements such as Ketac Molar easy mix and Fuji

IX. A coronal restorative material with a high value of traction resistance suggests a coronary restoration with a higher resistance in time.

Keywords: tensile strength, dental materials, composites, glass ionomer cements

Clinical observations for composite crown restorations and glass ionomers

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Direct coronal restorative materials based on acrylic resins and glass ionomer cements are commonly used in current dental practice. There were done extensive research on these materials, in order to notice their behavior over time, on retention, wear or color etc. This study evaluates the clinical behavior of dental restorations in temporary and primary teeth. We used as restoration materials glass ionomer cements (Ketac Molar easy mix and Fuji IX), resin-modified glass-ionomer cements (Vitremer) and resinbased composites: conventional, microfill composite materials (Filtek Z250 and Gradia) and nanocomposites (Filtek Ultimate and Premise). The advantages for using this kind of materials, as dental restoration materials, is the need of minimal preparation of the tooth, because the adhesion to the tooth is made through a bonding agent and does not need G.V. Black's "extension for prevention". Preservation of natural tooth structure is one of the aim of „minimally invasive dentistry" The success rates of dental restoration, was better, for resinbased composites than for glass ionomer cements. For resin-modified glass-ionomer cements (Vitremer), the clinical behavior over the three years of our study, was more successful, than for conventional glass ionomer cements (Ketac Molar easy mix and Fuji IX) but less good than for the resinbased composites. Still, we should consider the main advantage of glass ionomer cements, the release of fluoride and other ions and also the adhesion to the tooth. They perform well in lowstress areas. For resinbased composites, the cavity preparations is designed to conserve maximum enamel, the need for macromechanical retention is eliminated and the behavior over time is much better than glass ionomer cements. In temporary teeth, depending on the period of time left for them on dental arcades, we could use both of them with success.

Keywords: glass ionomer cements, composites, crown restoration

Models in fixed prosthesis

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The model is the first laboratory step in building fixed dentures. Any mistake will forward the realization of the final prosthesis. For this reason we consider inappropriate to ask a beginner technician to perform this in their lab. The research presents the conditions needed by models but also their classification, according to several criteria: their destination, the materials that can be achieved, the applied technology, the fixity or mobility of abutment (Abutment). There is also a presentation of the most used materials in the production of models. The choice of a material is based on mechanical-physical properties and the chemical nature of the footprint's material, but also on the technology for the realization of the chosen model. There is also a presentation of the most used materials in the production of models, techniques for achieving them, starting with a model in plaster block, then moving on to some techniques for achieving the PINs (classical method, the Pindex process, the Zeiser method, Kiefer method), and finally we have the presentation of some methods in order to realize models with mobilized blunt, without using PINs, technologies with lower costs price that do not require a special experience (System Tray, ACUU TRACK system, Zack model, model split, Di-Lock system, and so on). The last part presents some concepts of the virtual models (numeric) and how to scan an obtained model after chemical-manual footprint. The research ends with some conclusions presented by the authors about the advantages and disadvantages of each technique.

Keywords: mobilized blunt, virtual models

Outcome results of unilaterally lifting of the lip correction in the treatment of vascular anomalies and vertical disproportion of the upper lip

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Hemangiomas are benign tumor, the most common tumors at children, while most resolve in time. Percentage of women and men is 3-1 and the characteristics of hemangiomas are: rapid proliferation, slow regression or incomplete resolution during childhood. Vascular malformations are characterized by aberrant vascularization, although congenital, they are always evident at birth, they never involute, always

continue to grow in adulthood. Vascular anomalies including hemangiomas and vascular malformations affecting the face which never remitted have an impact on the patient's psychological and functional segment. As an characteristic of hemangiomas and vascular malformations: they change the skin color, change's the physiological shape of the lip, incomplete resolution of hemangiomas will produce a residue of telangiectasia, epidermal atrophy and / or excess of fibrous and adipose tissue. Goals of treatment are: to minimize complications, maximizing the extent of normal tissue in the late phase of involution, decrease of the interval until full regression is obtained (depending on the treating doctor).

Keywords: lip, lifting, surgery, plastic, treatment

The impact and need for ceramic dental facets

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Faceted aesthetic dental restorations first plates were made in 1930. These achievements were made due to the necessity of aesthetic restorations at the actors who did not want to shell grindingteeth for crowns. Over the years the art of coating the teeth of all progress improving preparation techniques and materials of which they are made, veneers made of composite resins, acrylic and not least of ceramics. The best are facets of ceramics because they have a high resistance to abrasion, resistance to staining, are well tolerated by gum tissues, especially long-term sustainability, marginal integrity, excellent aesthetic, functional and need not change before a cooking guide minimum tooth in question. Sure there are contraindications for the application of ceramic dental facets such as poor oral hygiene, mouth breathing, bad occlusion, bruxism and extensive caries. The paper presents several cases successfully resolved aesthetic restorations, the patients being completely satisfied. To conclude with certainty that we all want a whiter smile but as bright and therefore these aspects provides the opportunity to solve the aesthetic desires of the patient to a superior level of quality classical methods of treatment, and excellence in aesthetic dentistry is given the porcelain because of their similar texture and translucency of natural teeth.

Keywords: dental facets, aesthetic dental restorations, ceramic

Uprighting of tilted mandibular molars with support of skeletal anchoring devices

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This paper reports show as the effective method for uprighting tilted mandibular molars. The aim was to establish esthetically sophisticated and effective treatment mechanics without requiring support on the anterior arch. Uprighting was carried out with a 2 point force system on a mini-implant inserted in the premolar region and an uprighting spring. The segmental uprighting mechanics via mini screw anchorage is an effective method which can be carried out quickly, safely and easily to reach the treatment goal as planned. The biomechanics of the different ways to activate the segmental uprighting spring must be respected. The interdisciplinary collaboration between the dentist, implantologist and the surgeon makes it possible to obtain spaces openings for implants and bridges, space colsing , improvement of dental status for teeth positioning in order to obtain the functional occlusion in a short time and reach amazing results. The miniscrew can be insert between the mandibular premolars (the indirect method of ancorage). The uprighting spring is fixed on the tilted molar while the ancorage teeth is fixed on th miniscrew. The miniscrew can be insert also vertical in the alveolar bone and used as direct ancorage with the uprighting spring. In this case over the implant we must put and adjust compozit with a incorporate bracket .The advantage of the direct method is the simple direct insertion without involvement of the other teeth from the arch.

Keywords: mini-implants, biomechanics, uprighting spring

Aesthetics in implantology - beauty and prevention

Popescu Mugur George, Covrig Valeria, Vincze Dana

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With about 25 years ago, two teams of researchers (independently of one another), led by PI Branemark in Sweden (1969), and A. Schroder, Switzerland (1976) demonstrated that titanium implants can be integrated in the jaw bone through a mechanism known as osseointegration. This finding made the titanium, because of biological and excellent mechanical properties are widely accepted material for the manufacture of implants.

<http://www.jmedar.ro>

Implantology has become such an important component of modern dentistry, which has revolutionized the dental prosthetics, allowing restoration with fixed dentures, edentulous of which, until recently, enjoyed only by movable or mobile solutions. Because a healthy patient, implant osseointegration to occur under optimal conditions, the insertion of the implant site to be determined with great care, and inserting and stabilizing it to be done with a controlled pressure. There are physicians who consider that the placement of implants in partial edentulous patients is not a particular therapeutic method, independent, but rather a of the many options that can be taken into account if a comprehensive restoration plan. If, in the 80s, the main goal of treatment was the restoration of prosthetic masticatory function, in the 90s, the main goals of treatment have changed decisively, so that, at present, aesthetics play a major role (along with functionality) ; this has increased patients' aesthetic demands. The concept Follows implant bone "has been replaced by" Follows bone graft, Esthetics of function. " Currently, treatment plan objective is to provide patients optimal aesthetics and functionality for as long a period of time. From the outset, it should be noted that the achievement of supraimplantare PPF will be made only where there is a better health status of the patient and after an initial treatment phase in which they removed all the pathological processes that exist in the mouth.

Keywords: esthetic dentistry prevention implants

Experimental studies on the report "shape - mechanical stress" with prophylactic dento-periodontal effects in unidental fixed prosthetic restorations

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Summary: the research performed highlights the correlation between the shape and the mechanical tension, on experimental models that reproduce cost metal crown, cemented or not, that are different between them by thickness, occlusal aspect, using photo elasticity as investigation. The results obtained try to offer us some practical aspects on setting a proper shape for the cost metal crown, to assure the favorable transmission of the mechanical stress to the organic and periodontal substructure, also giving the prosthetic construction its resistance. Knowing the raport "Shape – mechanical stress" is of an undoubteble importance in the conception and the execution of prosthetic dental

restorations rigorously framed in the morphofunctional harmony of the dental arcade; it is also a warranty of the short term and long term efficiency of the micro-prosthesis therapy concerning the proper rehabilitation of the masticatory function and the prevention of a wide range of pathological disorders in the dento-maxillary area. This way, an important goal consists in the rehabilitation of the balance between those two forces – tensions – with contrary actions and directions, triggered during mastication: active or functional tensions and resistance tensions. In order to achieve this goal, knowing every particularity of these forces is indispensable, combined with the setting of the shape details which ensure both the favorable transmission of the mechanical stress to the organic substructure and also the resistance during the prosthetic construction.

Keywords: prosthetic construction, cast metal crown, unilateral fixed prosthetic

Interacting aspects between the determinant microbial factor, the favorable loco regional factors, the predisposition, the occlusal dysfunction, the maintenance function, the reactivity and the lesional periodontal shape

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Summary: the interaction between the determinant microbial factor and the favorable loco regional factors, systemic within the maintenance function, combined with the periodontal reactivity represents the synthesis of the pathogenic correlations in the maladjustment lesional periodontal syndrome.

Keywords: microbial factor, loco regional factor, lesional periodontal state, maladjustment periodontal syndrome.

Sealing - effective prevention method of dental lesions

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The pits and fissures are liable to risk caries, mostly for first permanent molars, but also at the rest of the teeth in oral cavity. It is better to assess the risk of caries, and prevent. Our recommendations for dentists to use in clinical decision making is based on our clinical study. The clinical recommendations are dependent on the

clinician's professional judgment and the individual patient's needs and preferences. The risk of experiencing dental caries exists continuum, therefore, caries risk status should be re-evaluated periodically. Sealants should be placed in pits and fissures of children's primary teeth when it is determined that the tooth, or the patient, is at risk of developing caries. Sealants should be placed on pits and fissures of children's and adolescents' permanent teeth, adults permanent teeth, when it is determined that the tooth, or the patient, is at risk of developing caries. Pit-and-fissure sealants should be placed on noncavitated lesions (discoloration not due to extrinsic staining, developmental opacities or fluoroscarious) in children, adolescents, young adults and adults, to reduce the percentage of lesions that progress. Resin-based sealants are the first choice of material for dental sealants. Glass ionomer cements can be used as preventive agent when there are indications for placement of a resin-based sealant. In these cases we are concerned about the moisture which can compromise such a placement. So, we recommend, a reassessment of these placements periodically.

Keywords: risk caries, sealing materials, pits and fissures

Irrigation endodontics

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The importance of the root canal irrigation during the mechanical treatment is well known, having a greater significance than the intracanal medication. The ideal irrigation solution does not exist, therefore a number of irrigants that complement each other must be used. The works of Grosman, Bauer and collaborators, also confirmed by other researchers, show that a root canal prepared without irrigation, has 70% more organic debris. The irrigation can be defined as a technique that involves the use of a liquid and an instrument. It acts through two ways: 1. a method through physical action, related to its quantity and volume; 2. a method through chemical action, related to its quality and nature. Because of the canal system's anatomical structure and the limitation of instrumental maneuvers, some parts of the root canal may remain ungrated. Through their solvency action, the intervention with irrigation solutions is life-saving, also it removes the nutritive layer of the infiltrated microbial flora, giving their bactericidal effect. The irrigation solutions frequently used in modern endodontics are: - Sodium hypochlorite solution 1-5,2%; - EDTA solution 10-17%; - Chlorhexidine 2%; - MTAD (citric acid 4,25%, doxycycline 3%, surfactant – Tween

80); - Hydrogen peroxide. A correct endodontic treatment can not be achieved without the use of the Diga (Rubber Dam). The time reduction for the irrigation can be achieved through increasing of the irrigant's temperature (50°), refreshing the irrigant solution and stirring it in the root canal. The required time for the cleaning of a root canal is 30 minutes. The root canal's size and configuration are essential for the irrigant's access. Successive lavages with Sodium hypochlorite solution, Hydrogen peroxide and EDTA disodium solution are recommended.

Keywords: irrigation, Sodium hypochlorite, EDTA solution, root canal.

The pathology of the jaw cyst – clinic and statistics study

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Introduction: The maxilla cysts which are endobone cavity formations appear due to the existence of the epithelial tissue in the thickness of the spongy of the maxilla bones. The origin of these epithelia is odontogenic and the neodontogenic. The epithelial of odontogenic origin comes from the adamantine organ of the tooth blade and it is represented by the enamel organ, undeveloped or developed abnormally or by epithelia residue included in the maxilla bones. (Malassez epithelia residue). The neodontogenic epithelia can be found especially in the maxilla and represents epithelia residue which covers the embryonic processes that will form the maxilla, residue of the nasal palatine canal or inclusions of glandular salivary epithelia. **Material and method** regarding the pathology of cysts made in the "Spitalul Clinic Judetean de Urgenta Arad", in the department of oro-maxillofacial surgery, on a sample of 250 patients, on a period of 3 years (between 2007 and 2010). In this article appears presented the incident of different forms of maxilla cysts depending on variables such as: age, sex, venue etc. **Results:** On this sample diagnosed with different forms of cysts, on a period of 3 years, in the above mentioned hospital there were closely followed the incidence of each form of cyst depending on the teeth it affected, on age groups etc. This data have been obtained from the medical observation charts and histopathology analyses, all found in the archives of the hospital in the OMF surgery department. **Conclusions:** The pathology of these cysts is frequently met both in the dentist clinic, but also in the OMF surgical floor. Their appearance can

be granted to the epithelia tissue residue that remained included in the embryogenesis course or residue of the adamantine organ. The most frequently met are the root cysts and after the residue cysts. The root cysts appear the teeth level, teeth affected by profound cavities and pulpal affections.

Keywords: cyst, maxilla, pain, membrane, cystectomy

Odontogenic maxilla sinusitis

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Sinusitis or better said rhinosinusitis is by definition the inflammation of the sinuses of the nose. Etiologically, the septical periapical processes, followed by the oro-antral communication represented the main factors incriminated in the occurrence of the odontogenic maxilla sinusitis. Odontogenic sinusitis is a disease with a high incidence and as different statistics pointed this disease has a prevalence between 8-12%, adults over 30 years old being the most frequently affected, existing an homogeneous distribution on genera. Chronic sinusitis of adults has most frequently an odontogenic cause, dental infections constituting 5-10% from all sinusitis that was registered. The dental units most involved in the occurrence of odontogenic maxilla sinusitis are the first maxilla molar, followed by the second molar. The surgical treatment has been proved to be the election treatment for the chronic maxilla sinusitis, postoperative relapse only rarely taking place. Sinusitis or better said rhinosinusitis is by definition the inflammation of the sinuses of the nose. Etiologically, the septical periapical processes, followed by the oro-antral communication represented the main factors incriminated in the occurrence of the odontogenic maxilla sinusitis. Odontogenic sinusitis is a disease with a high incidence and as different statistics pointed this disease has a prevalence between 8-12%, adults over 30 years old being the most frequently affected, existing an homogeneous distribution on genera. Chronic sinusitis of adults has most frequently an odontogenic cause, dental infections constituting 5-10% from all sinusitis that was registered. The dental units most involved in the occurrence of are the first maxilla molar, followed by the second molar. The has been proved to be the election treatment for the postoperative relapse only rarely taking place.

Keywords: chronic maxilla sinusitis, surgical treatment odontogenic maxilla sinusitis

The odontectomy of the 3rd molar

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The denture base fracture is an unsolved problem nowadays and the most frequent cause of an acrylic complete denture failure. Although in many European countries the Social Services spend a big amount of money for denture repair, there are few studies concerning the fracture types and the etiology involved in these fractures. According to our clinical experience, the maxillary acrylic complete denture fractures occurs more frequent. In maxilla the denture base is larger and thinner than in mandibula. Polyan polymer is useful for obtaining complete maxillary dentures, especially when heavy occlusal forces are involved. These prostheses will be intimate applied on Ah zone. The content in residual monomer is low, being extremely important for the health of the stomatognathic system. The content in residual monomer of thermoplastic injectable resin Polyan is low, 0,3%, compared to other thermopolymerized resins which content 2-4 % residual monomer. According to these results thermoplastic injectable resin Polyan is more compact, monomer free and suitable for long lasting dental treatments, comparing to other types of dental resins.

Keywords: last tooth, odontectomy, the 3rd molar, preoperative comments

An etimologic, anatomic, clinic and evolutive study of lip cancer

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Introduction: the high frequency of tumour affections and especially of malign tumours, the interest that this chapter of pathology presents without taking into consideration the location of the tumour has determined me to study one of the most frequent localization of the oro-maxillofacial domain: lip cancer. From the complexity of issues that this problem raises, we focused on the etiologic, anatomic, clinic and evolutive aspects which we compared with similar data from the literature we consulted. Material and method: In the "Spitalul Clinic Judetean de Urgenta Arad", between 2007-2010, 87 patients underwent surgeries with tumour pathology from a total of 300 patients submitted. Results: the surgical interventions consisted in the excision of the

tumour in oncologic limits, followed by the local-plasty in V, W, with flaps in the vicinity or from the distance. From the histopathological point of view, the most common malign tumour is the very well defined epidermal carcinoma. Conclusions: Lip cancer is the most frequent malign tumour affection of the oro-maxillofacial domain. The gravity of this affection depends primarily on the level of ganglions or on the bone existing in the vicinity. The bone interest is an evolutive study which complicates both the prognostic and the therapy that becomes uncertain. The most frequent cases of bone interest are realized indirectly, from a metastatic adenopathy which becomes in time adherent. After that, in the order of the frequency there appear the following methods of gripping the bone: through continuity from the lip level, through the mandible canal and through mix way. The treatment of malign lip tumours is multimodal, consisting primarily in surgical and radio-chemical-immunotherapeutic treatment. For the depiction of bones injuries, besides the clinic exam, the radiologic exam had an amazing importance.

Keywords: labial region, tumour, frequency, excision, local plasty

Trigeminal post-traumatic and odontogenic neuralgia

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Introduction: trigeminal pain is an abnormal pain reaction with a complex pathology, different from the neuralgic pains. The trigeminal pain paroxysms is almost unique in pathology and is reproduced only by the pains caused by the glossopharyngeal nerve neuralgia. Primarily, the pain is caused by the excitement of an adequate stimulus of an area of painful paroxysms. The significance of this area was mentioned by Patrick who initially named it "trigger area". The preferential centre of the trigger area is perioral or at the gingival alveolar level. It rarely depicted in the nasal wings, jugal mucosa or in the region above the orbits. Material and method: Between 2008 and 2010, in the "Spitalul Clinic Judetean de Urgenta Arad", in the oro-maxillofacial surgical department there were made 320 de consults that represent patients with trigeminal neuralgia from a total of 2680 patients submitted and who presented different pathologies. Results: the treatment of those 320 cases consisted in: local infiltrations with Xilina 2% (280

patients), alcoholisations (15), neurotomies (15 patients) and neurectomies (10 patients). The clinic symptoms in all patients is mostly the same, the patient presents a throat which is generally permanent, continuous, deaf with spontaneous feature, which in the majority of cases can be localized. Conclusions: the majority of patients undergo diverse treatments but without a positive answer from the patient's point of view. In the majority of cases this pathology is accompanied by other affections which contribute to the maintenance of the illness, without aggravating it. When undergoing the trigeminal neuralgic treatment we have to take into consideration not only the acute phenomenon but also the re-acute chronic affections which can be cause of alteration in general status of the patient. Because of all these motifs mentioned above we believe that a therapeutic approach is needed as early as possible of each particular case, avoiding this way the appearance of complications.

Keywords: trigeminal nerve, neuralgia, oral cavity, pain, vegetative phenomena.

POSTER PRESENTATIONS

Correction of the facial post- surgery defects with the help of epithesis

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As a follow up of certain intervention at the face level, especially the ones for malign tumors, there are several defects that are difficult or even impossible to correct by biological means. An alternative for such situations are the epithesis which are able to replace the lost tissue with the help of allo- plastic materials, mainly silicone materials. The epithesis are made in laboratory and in order to be very accurate they need specialization in that field. In this essay we are to present several cases, operated for malign orbital- maxillary tumors, cases in which the post- surgical facial defect was unaesthetic and very depressing for the patient. The correction with the help of epithesis ameliorates the local situation and has positive effect on the psychic. For the reasons presented above, we highly recommend epithesis, as they also have a benefic role in the re- integration of the patients on the social plan.

Keywords: tumor, facial defect, epithesis

State of dental health and evaluation of decay risk in Arad area

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The present essay has as purpose the appreciation of the risk factors and the morbidity caused by decay in order to place the patients into the appropriate risk groups and the foundation of an accurate therapeutic schedule. Periodontal disease can affect one tooth or many teeth. It begins when the bacteria in plaque (the sticky, colorless film that constantly forms on your teeth) causes the gums to become inflamed. The general part of the essay treats: the etio- pathogeny of the tooth decay, the morphology of the tooth decay, the clinical characteristics of the tooth decay, the epidemiology of the tooth decay. The special part comprises the presentation of the objectives of the study, of the materials and the methods used, the personal cazuistics, the results, discussions and conclusions. In order to the accomplish this statistic we have consulted a very rich bibliography (20 titles) in Romanian in English, what was very useful for use and for our study.

Keywords: tooth decay, epidemiology , morbidity

Retreatment in endodontics: resuming treatment versus surgical approach

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Just like in other dental procedures, endodontic treatments can fail. These failures occur frequently, resuming of treatment being a major component of many endodontic practices. Retreatment after a failed endodontic treatment can sometimes be an extremely complex process, which requires a great deal of time and, also, adequate technical equipment. Retreatment can be done through non-surgical procedure, surgical procedure, or combining both versions. The prognosis of retreatment must be evaluated carefully, taking into consideration alternative treatments and their possible advantages. It is very important to identify the probable cause of failure, prior to retreatment, in order to establish an adequate treatment plan. There has been an increased interest lately in endodontic retreatment and, most certainly, this will only increase in the near future, due to the increasing necessity to conserve teeth, including those in which endodontic treatment has failed.

Keywords: retreatment, failure, prognosis

Less invasive aesthetic procedures and the degree of satisfaction of patients

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Aesthetics has made over the years held both general medicine and aesthetic dental medicine treatments. Integrates the dental appearances, the dental and orthodontic dental-facial composition, so as not to be perceived as such, and that a natural structure, is the ultimate goal of cosmetic dentistry today. Cosmetic contouring is the reshaping natural teeth esthetic purposes, including not only reshape the incisal edge, but also involves the proximal surfaces, oral and buccal. In most cases patients are turning to teeth whitening are those having surface color changes, such as those from tobacco, coffee and colorful dishes and patients showing cracks are likely occurrence of such spots, which are very unsightly. The study was conducted on a group of 48 undergoing patients: teeth whitening, cosmetic reshaping and total prosthesis. The degree of satisfaction of patients was determined by a scale of 1-10, where 1 was unsatisfactory and 10 being excellent. Regarding the future of dental Easterners, we expect significant improvements both in terms of aesthetic dental materials regarding their use and techniques. Along with reducing the high costs of techniques in dentistry, more and more practitioners will introduce their practices to meet the requirement of medical improvement. Regarding the future of dental Easterners, we expect significant improvements both in terms of aesthetic dental materials regarding their use and techniques. Along with reducing the high costs of techniques in dentistry, more and more practitioners will introduce their practices to meet the requirement of medical improvement.

Keywords: dental appearances, dental-facial composition.

SECTION IV – Interdisciplinary research for students and young researchers

ORAL PRESENTATIONS

Considerations over radical surgery of gastric cancer

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Background. Gastric cancer is a major public health problem because it is late diagnosed in the great majority of the cases, and the surgeon is faced with an exceeded case related to the oncologic radicality, being forced to do palliative surgery. Situations in which the disease is early diagnosed by gastroendoscopy with biopsy, allows making radical procedures. That's why, depending on the tumors extension seen by echoendoscopy, in early gastric cancer it is indicated to do endoscopic procedures as mucosal resection or submucosal dissection, which are currently used in Japan. Radical surgery is addressed to all the tumor cases and satellite adenopathy which are resectable, and consist of total and subtotal gastrectomies with afferent lymphatic dissection, the great epiploon resection, associated or not with splenectomy. Method and material. We studied a 34 patients lot operated with gastric cancer, during a 3 years period. Results. Tumors localizations had the next distribution: 15 cases(44%) in the antrum, 12 cases (35%) in the lesser curvature, 5 cases(15%) in the great curvature, and 2 (5%) cardio-esophageal. There had been made 14 (41%) total gastrectomies, 12 (35%) distal subtotal gastrectomies with gastro-jejunal anastomosis, 7 (20%) distal subtotal gastrectomies with gastro-duodenal anastomosis, and 1 (3%) proximal subtotal gastrectomy with eso-gastric anastomosis. Discussions. Total gastrectomy is the intervention which fulfills the best the desiderates of oncologic radicality, but also cumulates the most complications. Distal subtotal gastrectomies are usefull in antrum localizations of the tumor. A la Roux montage with Y loop is indicated the most . In proximal subtotal gastrectomies there is the risc of a tense eso-gastric anastomosis. Conclusions. Early diagnosis of gastric cancer allows radical surgery .Total gastrectomy and distal subtotal gastrectomy, remain the most used procedures, with the a la Roux en Y montage.

Keywords: gastric cancer, radical surgery, gastrectomy.

Progeria – a rare childhood disease

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Hutchinson-Gilford progeria syndrome is a rare (frequency 1 in 4 millions) and uniformly fatal disorder characterized by “premature aging” of postnatal onset, that affects a variety of organ systems. Was described for the first time 120 years ago. The syndrome was given the name progeria (from pro=before, and Greek geras = old age). The main clinical and radiological features include alopecia, thin skin, hypoplasia of the nails, loss of subcutaneous fat (skin appears wrinkled and aged looking), and osteolysis. Children experience delayed growth and are short in stature and below average weight. Intelligence is not impaired. Children born with HGPS typically appear normal at birth, but within a year they begin to display the effects of accelerate aging. Early death is caused by atherosclerosis, and often preceded by hypertension, transient ischemic attacks and strokes. On average, death occurs at the age of 13 with a least 90% of HGPS subjects dying from progressive atherosclerosis of the coronary and cerebrovascular arteries. Most cases are sporadic, and older mean paternal age suggests a de novo dominant mutation. A truncating mutation within the lamin A gene has recently been reported in the majority of patients with Hutchinson-Gilford progeria. Numerous progeroid syndromes represent differential diagnoses for this entity.

Keywords: progeria, ageing, Atherosclerosis, lamin A, mutation.

Mouse liver architecture

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The liver is the largest gland in the body and performs a large number of tasks that impact all body systems. The liver is covered with a connective tissue capsule that branches and extends throughout the substance of the liver as septae. The hepatic lobule is the functional unit of the liver. It consists of an hexagonal structure made of plates of hepatocytes radiating outward from a vein in the center of the polyhedra (called centrilobular vein). At the vertices of the lobule are regularly distributed portal

triads, containing a bile duct and a terminal branch of the hepatic artery and portal vein. The parenchymal cells of the liver are the hepatocytes. These polygonal cells are joined one to another in anastomosing plates, with borders that face either the sinusoids or adjacent hepatocytes. The ultrastructure appearance of hepatocytes reflects their important metabolic function, with abundant rough endoplasmic reticulum, and Golgi membranes. Glycogen granules and vesicles containing very low density lipoproteins (VLDL) are readily observed. Hepatocytes make contact with blood in sinusoids with highly fenestrated endothelial cells and populated with phagocytic Kupffer cells. The space between endothelium and hepatocytes is called the Space of Disse which collects lymph for delivery to lymphatic capillaries.

Keywords: liver, hepatocytes, sinusoids, triads, space of Disse, Kupffer cells.

B vitamins nutrition

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B vitamins - have been used at the beginning of our century to name the disease factorcarențial Berbers. We now know that it is a vitamin B complex with fundamental nutritional role in the activity of cellular metabolism. B vitamins are some of the most important vitamins, attending oxidoreducereprocesses, the metabolism of carbohydrates, lipids, proteins involved in nervoussystem function and endocrine glands. Vitamin B1 (thiamine, aneurin) stimulates growth, especially carbohydrates digestion,to ensure normal functioning nervous system, muscles and heart.Vitamin B2 (riboflavin) are an important role in the metabolism of proteins, fats, butespecially of carbohydrates (lowers blood sugar) in the growth and respiration of cells in the normal process of vision, etc. Vitamin B3 (niacin, vitamin PP, nicotiamidă) is essential for the body because it hasvasodilator in the skin, serves the functioning of the central nervous system, increasesblood sugar and lowers cholesterol. Vitamin deficiency "B6" cause nervous disorders, dermatitis, hair loss, decreasedimmunity. Vitamin B10, B11 are growth factors, their absence leads to the appearance ofgray and eczema. Deficiency of vitamin B12 leads to anemia. Vitamin B13 may prevent some liver disorders and premature aging. Vitamin B15 protects the liver against cirrhosis, increases the lifetime of the cells, reduces the need for alcohol, helps to speed recovery after fatigue, lowers blood cholesterol levels.

Keywords: thiamine, riboflavin, vitamin PP, pyridoxine

The efficiency of administering drugs trough transdermic systems

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Transdermal delivery systems have become more increasingly important for treating neurologic and psychiatric disorders. Cholinesterase inhibitors have all been available in oral formulations but the rivastigmine patch was the first patch to be approved to treat Alzheimer's disease (AD). The goal was to review the available pharmacokinetic data that supported the rationale behind the development of the rivastigmine transdermal patch and its clinical effects in Alzheimer's disease. The 9.5 mg/24 h rivastigmine patch was shown to provide comparable exposure to the highest recommended doses of capsules (12 mg/day) with significantly lower maximum plasma concentration (C_{max} 8.7 vs. 21.6 ng/ml) and slower absorption rate (t_{max} 8.1 vs. 1.4 h). In a clinical trial of 1195 AD patients, this translated into similar efficacy with three times fewer reports of nausea and vomiting (7.2% vs. 23.1%, and 6.2% vs. 17.0% respectively). Consequently, more patients in the 9.5 mg/24 h patch group achieved their target therapeutic dose at the end of the study, compared with those in the 12 mg/day capsule group (95.9% vs. 64.4%). This treatment is well tolerated by patients because drug delivery is even and continuous, reducing fluctuation in drug plasma level, and attenuating the development of centrally mediated cholinergic side effects. Improved compliance with a subsequent drug administration may contribute to better clinical efficacy, reduce caregiver burden, result in a slower rate of institutionalization, and lead to a decrease in healthcare and medical costs. Because of these advantages, the rivastigmine patch has enabled great progress in treatment of AD, and may allow patients to achieve optimal therapeutic doses and to benefit from a longer duration of treatment.

Keywords: patch, transdermal system, Alzheimer's disease, rivastigmine, dementia

Inlays, advantages and disadvantages of gold

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Inlays are unidental fixed prosthesis of small dimensions which restore from a morphological and functional point of view a loss of substance in the tooth. These types of prosthesis are recommended considering a large number of indications such as: morpho-functional reconstructions of teeth affected by less extensive or less deep pinholes, restoring the functional occlusion, aggregation element for bridges of small layout, in occluso-proximal cavities, either by the inlay classical method or by the modern method of fixing with adhesive techniques, immobility of paradontotic teeth, support for skeletal prosthesis. There are not absolute contraindications, being evident just a few relative contraindications, such as: too extensive or too deep pinhole processes, an evident predisposition to tooth pinhole, a deficitary oral hygiene, on teeth with no pulp, at teenagers under 18 when the preparation can damage pulp room, in bad occlusions. Cavity preparation is done after the principles and according to the sequence of phases described by Black: opening of the cavity, the excision of old dentine, preventive extension, ensuring retention, ensuring the walls resistance, beveling edges, checking of the cavity, retouching. The making of inlays follows several steps: the preparation of the cavity, the imprint (is done only when it is not used the method of inlays directly in the oral cavity, by the dentist in his lab), the model (which has to be precise, showing exactly the situation from the patient's oral cavity), the layout (made of wax or synthetic resin), the pattern, the preparation of the packaging mass, the packaging itself (classical and modern).

Keywords: Inlay, unidental prosthesis, pinhole processes, cavities.

Intraoperative difficulties in occlusive colon cancer

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Background. The most frequent complications of colon cancer are hemoraghy and intestinal occlusion. Patients with colon cancer are surgical emergencies, and elevate special problems related to operatory technique and the treatment of the occlusional shock. Method and material:

<http://www.jmedar.ro>

An 88 patients lot was studied, which were operated of occlusive colon tumor, in a 3 years period. Results. 43,1% of the cases were in II stage TNM, 40,9% in III stage, and 16% in IV stage. Tumors localization was: ascendant 20%, transverse 9%, descendent 16%, and sigmoid 55%. Surgical procedures that were used were :39% Hartmann operations, 20% right hemycolectomies, 21% segmentary colectomies, 14% left hemycolectomies and palliative colostomies in 6%. Intraoperative difficulties were: satellite lymphnodes invasion in 37% of the cases, tight peritumoral adherences – 23%, perforations with localized peritonitis – 15%, hepatic metastases 13%, penetration in nearby organs – 8% and fistulas – 4%. Discussions: occlusive colon cancer involves more frequently the left colon, especially the sigmoid. There are intraoperative difficulties related to the releasing of the tumor from the adherences, related to the dissection of satellite tumoral adenopathy, and to the invasion of nearby organs, which implicate supplementary resections. The presence of single or small number of accessible hepatic metastases allows their excision in the same operatory time. A special problem is the inequality of supratumoral and subtumoral segments, which increases the risk of the anastomotic dehiscence. That's why, in this situations, every time is possible, it's wiser to do a Hartmann procedure with colostomy. Conclusions: Occlusive colon cancer elevates important problems to the surgeon related to the loco-regional and distant invasion of the neoplasia, on one side, and on the other, related to the technical solution of intestinal transit restoration. In the left colon localizations, in situation of great distention of postresection proximal segment of the colon, Hartmann operation is indicated.

Keywords: occlusive colon cancer, Hartmann operation.

HIV infection in pregnancy. Case report of a young woman screened positive for HIV in pregnancy

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HIV (Human Immunodeficiency Virus) in perhaps one of most feared infectious diseases and for certain a problem that needs a better and more responsible attitude from both health and administrative representatives, but also from patients. HIV (Human Immunodeficiency Virus) is a virus that affects the immune system of a person, weakening its capacity to defend against pathogen agents and determining in time

AIDS (Acquired Immune Deficiency Syndrome) to those infected. AIDS it's not a disease, but a complex of different diseases affecting in a common way those infected with HIV, diseases that would not harm a healthy organism. We report the case of a 19 years old pregnant woman who was positive for the HIV screening test performed in our hospital. This case proves that although the medical care providers tried to apply best the HIV protocol that we want to emphasize in this paper for a pregnant woman discovered HIV positive in pregnancy, sometimes it is very difficult because of the patient's refractory behavior and lack of knowledge and education. This case report offers us the chance of discussing the importance of the antenatal care for pregnant woman and the specifics of HIV infection in Arad County. HIV infection in young people is a very delicate issue and it is somehow characteristic for this country. The lack of medical education in low income families and its low addressability to the general practitioner leads to severe cases that otherwise could be easily prevented by an efficient screening program.

Keywords: HIV, pregnancy, medical education, screening programs

Surgical treatment of ovarian tumors in pregnancy. Case report of a dermoid cyst diagnosed and treated during a cesarean section procedure

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The ovarian benign pathology is the most frequent pathology that requires surgical treatment for women in their fertile period. Its incidence is even higher if we take into consideration the patients that are diagnosed with persistent ovarian cyst or dysfunctional cyst with spontaneous resolution in a routine gynecological check-up. The incidence of ovarian cyst in pregnancy is between 1:81 and 1:2500. The frequency of detecting an ovarian cyst in pregnancy is 26/36% in the first trimester and it decreases in the next two trimesters. Luckily most of this cyst diagnosed in the first trimester of pregnancy are less than 5cm and regress spontaneously. Most of the ovarian cysts are asymptomatic in pregnancy, but some may present with adnexal torsion syndrome and shock or haemoperitoneum and shock. The risk of malignancy has to be discussed. We report the case of a large solid ovarian tumor diagnosed and treated during a caesarean

section procedure performed to a 32 years old woman. She was in her 39th week of pregnancy, also known with a low insertion of the placenta and presented with vaginal bleeding. Because of the intraoperative conditions (large solid tumor, adhesences) ovariectomy was performed. The histological exam of the resected tumor revealed a dermoid cyst. This paper wants to emphasize the importance of a good and early diagnosis of any ovarian tumor in pregnancy which will offer chances for a better management. The ultrasound examination of the ovaries in the first trimester sonography for pregnancy is also highlighted.

Keywords: ovarian cyst, pregnancy, caesarean section, ultrasonography

Miscarriage and under age pregnancy

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The definition of miscarriage in Romania is: the loss of a pregnancy before 28 completed weeks of gestation or the expulsion of fetus or embryo weighting less than 1000g. WHO (World Health Organization) and other countries define the abortion as the loss of a pregnancy before 24 completed weeks of gestation or expulsion of fetus or embryo weighting less than 500 g. These definitions offer place for controversies for the cases of pregnancies ended between the 24th and 28th week of gestation. It is known that between 10 and 15% of clinically recognizable pregnancies will end in miscarriage. Etiologically, second trimester miscarriages may be associated with uterine abnormalities, cervical incompetence, bacterial vaginosis and multiple pregnancy. We present the case of a 14 years old patient presenting in the emergency room with abdominal pain and about six month amenorrhea. She hasn't been referred to any other medical service before. After the clinical and ultrasound evaluation it was established that it is a 27th week of gestation undergoing miscarriage at full dilatation of the cervix and the amniotic membranes are still intact. Soon afterwards the miscarriage took place and specific care was given to the patient, her evolution being favorable. This case report wants to bring into attention the problem of under age pregnancies, of medical education and lack of addressability of many low income patients, the psychological effects of a

miscarriage and of the medical controversy about the thin border between miscarriage and birth.

Keywords: miscarriage, under age pregnancy, medical addressability

Clinical aspects and imaging in cirrhosis

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STUDY OBJECTIVES-In this paper we studied hospitalized patients with liver Cirrhosis, diagnosed and monitored in the Department of Internal Medicine Clinical Municipal Hospital of Arad, following the evolutionary features and associated comorbidity Materials and methods-The study was conducted on a group of 30 patients hospitalized in the Department of Clinical Municipal Hospital during January to December 2009. All patients were assessed clinically, we performed a thorough history focusing on some possible etiologic factors, earlier detection of infection with hepatitis viruses, cytomegalovirus, infectious mononucleosis . **Conclusions-**Liver cirrhosis is a disease prevalent in both ambulatory and hospital practice. Liver cirrhosis is more common in males in V decade of life. Using Doppler ultrasound can give important information on the portal blood flow, the spleen and collateral circulation .

Keywords: imaging in cirrhosis

Presentation of case

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We present a female patient V.D. aged 61 years old with Nephrotic syndrome Anasarca Post-necrotic liver cirrhosis {C} virus Diabetes mellitus type 2 treated with insulin Chronic autoimmune thyroiditis with severe hypothyroidism Morbid obesity Stage III essential hypertension with very high cardiovascular risk Secondary Thrombocytopenia onic renal failure of nitrogen progressive. The patient presents in the emergency room for admission to the following reasons - dyspnea with orthopnea, -generalized edema, -13 kg extra weight in the last month -marked blood pressure values hospital are targets for case presentation. A complex combination of physio-pathological morbidity with particular links. Conclusion by treatment with diuretics

blood pressure were recorded in remission, edema resolved, life and overall condition improved.

Keywords: nephrotic syndrome

Surgical abdominal reinterventions - technical operative problems

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Background. Reinterventions are operations conducted shortly after the first surgical procedure. They involve high risks for the patient but are necessary to correct undesirable life-threatening state resulting from previous surgery. **Material.** We studied a group of 43 patient with reinterventions on the abdomen. **Results.** The distribution of cases was as follows: 7(16,66%) postoperative eviscerations, 6 (14,28%) cases of postcolecistectomy biliary peritonitis of which 5 after laparoscopic procedure, 5(11,9%) necrotic pancreatitis, 4(9,52%) enteric fistulas, 4(9,52%) mechanic - inflammatory occlusions, 4(9,52%) peritoneal abscesses after colon or rectum cancer cure, 3(7,14%) stercoral fistulas, 3(7,14%) post perforated duodenal ulcer peritonitis, 3(7,14%) post appendectomy peritonitis, 1(2,38%) gastric cancer, 1(2,38%) pancreatic cancer, 1(2,38%) massive hematoma after inguinal hernia cure. **Discussions.** In the eviscerations surgery „Georgescu” rings were used. In peritonitis and abscesses were performed lavage and drainage of collections, as well as dealing with their source, when it was possible to identify it. In pancreatitis necrectomies and drainage were performed, and in fistulas intestinal resections or stomas were made . Intraoperative difficulties were usually important being represented by laborious dissections of visceral adherential blocks, by identifying and correcting localized or generalized peritonitis sources, and especially by the poor tissue quality at patients with sepsis and multiple organ failure. **Conclusions.** Reinterventions in abdominal surgery are burdened with significant additional risks comparative to primary operation because it involves major difficulties related to surgical restoration of the regional anatomy, to the low quality of the tissues ,and to the presence of sepsis in a patient often with multisystem exhaustion . On the other hand avoiding reintervention when is necessary, or not doing it on time have bad consequences , often fatals.

Keywords: reinterventions, abdominal surgery, high risks.

FibroScan accuracy in liver fibrosis quantification

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Abstract: Transient elastography (Fibroscan) is a noninvasive method of assessing liver scarring, termed fibrosis. Progression of liver fibrosis has been reported to increase the measurement value (elasticity). It is a new ultrasound based technology. It is performed at the bedside in the clinic. Body mass index (BMI) greater than 28 is associated with high rates of invalid tests (has limited usefulness in obese patients). A mechanical pulse is generated at the skin surface, which is propagated through the liver. The velocity of the wave is measured by ultrasound. The speed of this wave correlates with the stiffness of the liver, which in turn reflects the degree of fibrosis. Fibrosis quantification is the key indicator in chronic liver disease evaluation whatever the etiology, being also a precise and predictive factor of complications. The stiffer the liver is the greater the degree of fibrosis. The result is given as a specific score in kilopascals (KPa) which is the median score of at least 10 readings. Fibroscan can monitor the progression or regression of an individual's liver disease and give an accurate quantitative measure of the success of treatments or lifestyle modification. Fibroscan technology allows accurate assessment of liver fibrosis. Fibroscan is a potentially useful adjunct to assess risk of liver decompensation and complications among liver disease undergoing liver resection.

Keywords: transient elastography, fibrosis, non-invasive, kilopascal, accuracy.

The significance of gastric precancerous dysplastic lesions

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Background. Precancerous gastric lesions (PGL) are dysplastic and metaplastic changes of the gastric mucosa being considered as precursors of stomach carcinoma. Of these the most important in terms of the carcinogenic potential is severe dysplasia (grade III), which is contained in the Vienna Classification in the same group with carcinoma in situ. PGL study is important in

achieving an effective prophylaxis and an early detection of gastric cancer. Material and methods. We studied a group of 736 patients that had endoscopic gastric biopsies performed during 4 years. Results. Of the 736 cases, 579 were PGL and 157 gastric carcinomas. PGL distribution was as follows: low dysplasia - 116 cases (20% of 579), medium dysplasia - 143 cases (25%), severe dysplasia - 75 cases (13%), low and medium dysplasia association - 37 (6%), low and severe dysplasia association - 21 (4%), medium and severe dysplasia association - 23 (4%), low dysplasia and intestinal metaplasia association - 26 (5%), severe dysplasia and carcinoma in situ association - 33 (6%), severe dysplasia and invasive carcinoma association - 38 (7%) and intestinal metaplasia - 67 (11%). Discussions. We notice the large number of dysplastic lesions diagnosed in four years, of these, however, the severe ones must be pursued and dealt with great attention. We note the large number of associations between severe dysplasia and in situ or invasive carcinoma, suggesting their close affiliation. Conclusions. PGL are not at all a negligible presence in the gastric mucosa and deserve great attention in terms of their oncogenetic potential. Severe dysplastic lesions are frequently associated with carcinoma in situ or invasive and, as it is emphasized in the Vienna Classification, they must be endoscopic or surgical excised.

Keywords: gastric severe dysplasia, carcinogenic potential, excision.

Griffonia simplicifolia, The natural source of 5-HTP

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5-HTP (5-Hydroxytryptophan) is a naturally occurring amino acid found in significant levels in seeds of *Griffonia simplicifolia* and used in the treatment of the numerous effects of serotonin deficiency syndrome. 5-HTP is a derivative of the amino acid tryptophan. Our body produces its own supply of 5-HTP from tryptophan, an amino acid found in high-protein foods such as chicken, fish, beef, and dairy products. 5-HTP is a mood-enhancing chemical that may induce sleep, regulates mood, and control appetite. Unlike many other supplements (and drugs) that have molecules too large to pass from the bloodstream into the brain, molecules of 5-HTP are small enough to do so. Once in the brain, they're converted into serotonin. 5-Hydroxytryptophan (5-HTP) is a precursor to Serotonin, that may increase serotonin levels to promote healthy sleep pattern,

regulate mood, and control appetite. Europeans have been taking 5-HTP for decades to treat insomnia and depression. Benefits of 5-HTP include: -Elevate mood in cases of depression, anxiety, and panic attacks; -Treat insomnia; -Promote weight loss; -Ease migraine pain; - Increase tolerance to the pain of fibromyalgia

Keywords: Griffonia simplicifolia, 5-HTP

Congenital bladder neck disease with vesico-ureteral reflux and secondary renal dwarfism

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The congenital bladder neck disease consists of cervical changes, hipertrofia or sclerosis of cervical smooth muscle, determining a continuous contraction an obstruction. Bladder obstruction and dilatation are the elements that generate the symptoms: dysuria, frequency, feeling of incomplete urination, weak flow projection. Patient aged 19 years, diagnosed in 1999 with pituitary dwarfism, is presented on January 14, 2011 in Arad County Hospital, Departament of Gastro-Enterology with nausea, bilious vomiting, diffuse abdominal pain, more pronounced at the right iliac fossa palpation, pallor. Her condition worsens in these two days of hospitalization, entering in metabolic acidosis and coma grade II. Under supportive care her condition improve after about 30 hours. The abdominal ultrasound examination urinary tract obstruction. Hypoplasia of the right kidney, left kidney with pielo-caliceal dilatation and the thickened bladder wall. The patient is transferred to the Urology Clinic, with bilateral uretero-hydronephrosis and incomplete chronic retention of urine. The retrograde cystography shows bilateral vesico-ureteral reflux. After drainage with vesico-ureteric catheter remission of bilateral uretero-hydronephrosis is obtained. Treatment of congenital disease of the urinary bladder neck, is removing of obstruction. Cystoscopy and bladder neck transurethral incision (endoscopic cervicotomie) has been practiced. Congenital disease can be detected during pregnancy or right after birth by ultrasound examination. They should be treated before affecting the urinary tract or the whole body.

Keywords: congenital bladder neck disease, renal dwarfism, cystoscopy, endoscopic cervicotomie, vesico-ureteral reflux

The treatment with plant products in heart failure

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The vegetable products are used in ancient times to treat heart failure and supraventricular tachyarrytmias. Heart failure is a pathological state in which, under a normal venous return, the heart isunable to provide adequate blood flow to the metabolic needs of tissues or blood flowachieved with the high price of filling pressures. Herbal products are used to treat heart failure and supraventricular tachyarrythmiasact on the mechanism of rhythmic intracellular Ca²⁺ + release via ATP-ase inhibition of Na + / K + membrane Mg²⁺ - dependent. The best know are: Digitalis purpureae, Convallaria majalis, Adonis vernalis. Treatment of heart failüre varies by disease stage. In stages III and IV is administered cardiac glycosides, cardiac pure, alone or in combination with coronarodilatatoare drugs or stimulants circulation. In mild heart failure (stages I and II) is administered standardized preparations containing powders or standardized extracts obtained from plant products containing cardioglicozide order II. Digitoxozida of Digitalis purpurea is indicated for the treatment of chronic heart failure. At oral, digitoxozida is almost completely absorbed (95- 100%). Digitoxozida fall in preparations DI GI TA NA LI ® - internal use solution 1 mg / ml and DIGIMERCK ®. Convallariae herba extracts are used in some standardized monopreparate: CONVACARD ® or combination of preparations: MIROTON ®, CORLOGES ®, LACOERDIN ®.

Keywords: Digitalis purpurea, Convallaria majalis, Adonis vernalis, heart failure

Medical school students and comparative to other specialties occupational stress

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Aims This study purpose is to evaluating the psychosocial stress among different students our University. Materials and method. Our study comprises 186 students from various specialties from our University: General Medicine Faculty, Management Faculty, Law Faculty and Psychology Faculty. A questionnaire comprised the following aspects: anxiety,

socio demographic aspects, psycho physiological symptoms, and satisfaction. For evaluating the somatic symptoms of anxiety (heartburn, loss of appetite, nausea, vomiting, abdominal pain, irregular intestinal functioning, insomnia, headache, nightmares, sexual lack of appetite, palpitations, trembling hands, excessive sweating, loss of energy, irritability) and the satisfaction regarding the job, we used the following scales: Stress Symptom Scale Job Dissatisfaction Scale. Results. Our results showed specific associations between situational stressors, socio demographic aspects state and satisfaction. In particular, frustration in carrying out their work is linked to high levels of self-reported symptom. All medical students present stress symptoms "quite often" or "frequently or continually" in contrast to other specialties students. Despite these results, almost all medical students present at Job Dissatisfaction Scale scores of 1 or 2. Conclusions. The difference between the scours is significant in the group of medicine students compare to others specialties, with a high incidence of psycho physiological symptoms probably due to physical suprasolicitation. Self-efficacy moderates the stress- strain relationship in general, in the sense that low levels of self-efficacy are related to high levels of occupational stress among students from medical faculty.

Keywords: medical school students, occupational stress.

Gastric ulcer-considerations

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Gastric ulcers are gastric mucosal lesions. These injuries occur when gastric secretions - hydrochloric acid containing pepsin - irritates and damages the stomach lining. Two cases of the most common causes of peptic ulcers are infection with bacteria called *Helicobacter pylori* and abuse of anti-inflammatory drugs (AINS) such as Aspirin. Although most people are infected with *H. pylori*, only a few will make peptic ulcer disease.

Keywords: ulcer gastric

Testicular torsion

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Testicular torsion in testicular torsion the spermatic cord that provides blood supply of the testicle is twisted, blocking the blood and cause frequent orhialgie. Prolonged testicular torsion can cause necrosis of the testicle.

Keywords: testicular torsion

Cimino arterio-venous fistula in old people - indications and intraoperative problems

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Background. Arterio-venous fistulas (FAV) of Cimino-Brescia surgical type are widely recognized as being very useful for the haemodialysis of the patients with chronic renal failure (CRF) in advanced stages. There are many discussions about the risks and the benefits of performing FAV in old people compared with permanent central venous catheters. Methods. A lot of 21 patients with CRF, aged between 60 and 84 were assessed. Results. From a lot of 21 operations performed under local anesthesia, in 19 interventions (90,47%) FAV was performed, and in 2 cases (9.53%) inefficient veins were found, making us renouncing to FAV. 8 patients meaning 38.09% of the cases presented atheromatous arteries. 8 patients (38.09%) presented veins of reduced gauge, and 4 cases (19.04%) had diffuse intraoperative bleeding. In 3 patient (14.28%) the venous flow of FAV was insufficient. There were no cardio-respiratory incidents. Making FAV in the elderly exposes more difficulties due to often presence of atheromatosis of the radial artery, especially at diabetics, and of poor venous capital. These problems, joined by the high frequency of coagulation deficits or, on the contrary, of favoring factors of thrombosis, increase the risk of intra- and postoperative local complications. However, a significant majority - 16 cases from 21, that means 76.19%, shows that FAV functions well. The local anesthesia reduces very much the risk of cardio-respiratory complications, important at the old people. Conclusions. FAV represents a real benefit for the old people, despite the increased difficulties in realizing it, in experienced surgical hands and local anesthesia. The exceptions are

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the patients with severely affected cardiac function which will have difficulties in tolerating the FAV with increased blood flow. At these patients enters into discussion the indication for a permanent central venous catheter.

Keywords: Surgical arterio-venous Cimino fistula , old people

Current news regarding asthma treatment

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Asthma is a disease that affects the bronchi. The bronchi are branches of the trachea that conduct the air to the alveoli. In asthma patients, the bronchi are narrowed so that difficulties arise in the circulation of the air in inspiration as well as in expiration. Characteristic of asthma is the important role played by bronchial muscle contraction. Materials and methods: we conducted a retrospective study on two lots of patients with moderate persistent asthma, of which a lot of 30 patients (18 male patients and 12 female) who received sublingual immunotherapy and a lot of 30 patients (18 male patients and 12 female) who received the standard treatment for asthma. In the lot of 30 patients treated with sublingual immunotherapy was noticed the lack of exacerbations of the disease compared with those with standard treatment where an increase in asthma exacerbations was noticed. Conclusions: Specific allergen immunotherapy is an effective treatment of allergic diseases that is not confined to the improvement of symptoms, but acts on the underlying immunological mechanisms, interfering with the natural progression of the disease. Immunotherapy is a form of anti-allergic vaccine, which aims to reduce the sensitivity to the offending allergens, causing long-term symptomatic improvement, reducing the need of administrating medication and even prevent the occurrence of asthma.

Keywords: sublingual imunotherapy, asthma, effective treatment.

The role of leptin, hiperleptinemy and leptin resistance in patients with metabolic syndrome

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The role of leptin, hiperleptinemy and leptin resistance in patients with metabolic syndrome. Leptin is a peptide
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hormone that is produced predominantly by white fatty tissue. It promotes satiety and increases the metabolic expenditure by activating central neural leptinic receptors and promotes negative energy balance. The levels of plasmatic Leptin reflects the mass of the fatty tissue, and it has high levels in obesity. Many research results show that subcutaneous fatty tissue and visceral fatty tissue are not just passive energy source, but also an important endocrine organ that regulates various physiological functions. In addition besides storing fat and using it for energy transformation (the latter is characteristic only for Brown TA cells), adipocytes produce special proteins, called adipokines. These bioregulators participate in maintaining energy homeostasis, regulating glucose and lipid metabolism, as well as tissue sensitivity to insulin. Leptin is a protein with 167 amino acids secreted by adipocytes that circulates in the blood in an amount proportional with the mass of fatty tissue and it has the role to send a signal of satiety to the hypothalamus. Although initially it was thought that leptin is secreted exclusively adipocytes, recent studies have identified additional locations for the production of leptin, including placenta, stomach, ovaries, skeletal muscle, mammary glands, pituitary and brain. However, the fatty tissue is the main if not unique source of circulating leptin. Leptin promotes weight loss by reducing appetite and food intake and increasing energy expenditure. Severe obesity and hyperphagia caused by the absence of leptin in rodents and humans clearly show that this hormone is essential for body weight and control of food intake. The discovery of the phenomenon of central leptin resistance was a cornerstone in understanding the mechanisms that induced pandemic obesity and metabolic syndrome. Multifactorial polygenic obesity is frequently associated with hiperleptinemy, which is regarded as reflecting leptin resistance. However, obesity is frequently associated with hypertension and increased sympathetic activity. That is, obesity is associated with resistance to the actions of satiety and weight loss induced by Leptin but preservation of sympathetic action.

Keywords: leptin, leptin resistance, metabolic syndrome, obesity, hiperleptinemy.

Risk Stratification in Acute Coronary Syndromes

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Acute coronary syndromes (ACS) represent a clinical spectrum that extends all the way from unstable angina

presenting with worsening episodes of chest pain, to non-ST segment elevation myocardial infarction (NSTEMI) with more prolonged chest pain and biochemical evidence of myocardial injury, to ST-segment elevation myocardial infarction (STEMI) with more extensive myocardial damage and usually the formation of Q-waves on the surface electrocardiogram, and finally to sudden cardiac death. Pathophysiologic correlations in ACS include minor plaque ulceration and transient thrombus formation in unstable angina, more extensive thrombosis in non-Q wave MI, and complete occlusion in STEMI and sudden death. Atherosclerotic plaque rupture with thrombus formation is the primary pathophysiologic mechanism behind ACS. Unfractionated heparin exerts its antithrombotic effects by binding to antithrombin III and inhibiting thrombin action. Data regarding the use of unfractionated heparin in patients with ACS have been conflicting. Patients with ACS present with a wide spectrum of clinical risk for death and cardiac ischemic events. Ideally, one ought to be able to identify high-risk patients who might benefit mostly from an aggressive invasive approach, and those with lower risk where conservative management might be more appropriate. Clinical criteria have been developed to allow clinicians to take decisions on time and to choose optimal treatment, based on risk stratification and a targeted approach to intervention. In practice we can find two categories of patients: (1) Patients with suspected ACS with chest discomfort evolving and persistent ST segment elevation (or newly installed BRS). Persistent ST-segment elevation generally reflect total acute coronary occlusion. Therapeutic goal is rapid recanalization, complete and sustained by fibrinolytic therapy (without contraindications) or primary angioplasty (if technically feasible), (2) Patients who present with chest pain accompanied by ECG changes suggesting acute ischemic heart disease. Patients with ACS who are at higher risk are likely to benefit the most from an early invasive approach. In lower risk patients, both approaches yield similar outcomes, but a conservative approach might be more cost-effective. ACS remains a vexing clinical problem. Beneficial medications include aspirin, clopidogrel, unfractionated and low-molecular-weight heparins, and platelet GP IIb/IIIa receptor inhibitors.

Keywords: Q waves, ACS, Myocardial damage, chest pain, heparin, thrombus, risk

Parental attitude regarding antibiotherapy in pediatrics

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This paperwork comes like a warning regarding the increased use and misuse of antibiotics, given the fact that over 25,000 people die annually in Europe due to antibiotic resistant infections, and Romania ranks 3rd in Europe among countries with the highest resistance to antibiotics, 4th in top of countries with the largest stocks of antibiotics held by at home and 1st place in which regards the consumption of antibiotics. This paper is a multicenter study, based on a questionnaire survey. Questionnaires were completed by parents of children admitted in pediatric clinic department of the Emergency County Hospital of Arad, Department of Pediatrics Emergency Hospital Dr. C-tin Opris Baia Mare and Department of Pediatric Clinic of the Timisoara County Hospital. The questionnaire was developed in the pediatric clinic and consisted of 20 questions for parents of children admitted to clinics in Arad, Baia Mare and Timisoara. Questions focused on knowledge of parents attitudes towards the introduction of antibiotic, the antibiotic administration criteria, frequency of antibiotic use in the family, notions of antibiotic resistance, frequent use of antibiotics, lack of knowledge regarding antibiotics administration, the need of a physician guiding, self medication and lack of medical knowledge on handling antibiotics and potential risks. All data obtained from questionnaires processing were centralized and interpreted using statistical method.

Keywords: antibiotics, therapy, resistance, infection, pediatrics, misuse.

An Outline of Yawning

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Yawning involves opening the mouth involuntarily while taking a long, deep breath of air. This is usually done as a result of drowsiness or weariness. Yawning is generally accompanied by stretching and occurs most frequently before sleep and after waking. Yawning has long been associated with monotony and sleep. Excessive yawning is yawning that happens more often than would be expected, even if drowsiness or weariness is present. In

the past, physiologists argued that the yawn reflex was a brain stem reaction to high levels of carbon dioxide (CO₂) in the blood stream. The deep inspiration and expiration was argued to allow the intake of extra oxygen during the deep inspiration and the explosive venting of built up carbon dioxide during the deep expiration. Conversely recent research involving controlled inspiration of mixtures of air with varying amounts of oxygen failed to clearly indicate or support the inspiration-ventilation hypothesis. Moreover, researchers have also discovered that yawning might also have a Brain Cooling Mechanism; for that reason I want to show in this paper some insights in the yawning reflex; the yawn reflex is not a conventional neural reflex arc, but rather a synchronized neural and muscular arousal reflex mediated by the brain stem. The exact mechanisms stimulating the yawn reflex remain scientifically debatable.

Keywords: yawning, cooling mechanism, ventilation, lack of oxygen

Hyperuricemia as a marker of atherogenic disorders in the metabolic syndrome

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The association of elevated serum uric acid (hyperuricemia, gout) with the presence of classical coronary risk factors and coronary artery disease (CAD) or myocardial infarction (MI) has been analysed in many epidemiological studies. Numerous studies have revealed that hypertension, high body mass index (BMI), lipid disorders (especially raised triglyceride (TG) levels and low high dense lipoprotein cholesterol (HDL-C) level), and increased creatinine or insulin levels have caused hyperuricemia. Gout has often occurred with typical disorders for the metabolic syndrome X. Significant correlation of the serum uric level and the CAD presence and severity of coronary atherosclerosis confirmed by coronary angiography has been observed in women. Hyperuricemia has also indirect influence on progress of CAD by physical activity restriction, what causes sedentary mode of life and lead to obesity. Therefore, we conducted our study in order to estimate uric acid levels in patients with metabolic syndrome and coexisting cardiovascular system diseases.

Keywords: hyperuricemia, metabolic syndrome, cardiovascular diseases

The role of hypertension in progression of chronic renal disease

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Hypertension is a cause and consequence of chronic renal disease. Data from the United States Renal Data System (USRDS) identifies systemic hypertension as the second most common cause of end-stage renal disease, with diabetes mellitus being the first. Renal failure in patients with hypertension has many causes, including functional impairment secondary to vascular disease and hypertensive nephrosclerosis. Even in those in whom hypertension is not the primary process damaging the kidney, elevations in systemic blood pressure may accelerate the rate at which kidney function is lost. This accelerated loss of kidney function occurs particularly in patients with glomerular diseases and clinically evident proteinuria. Hypertension may damage the kidney by several mechanisms. Because autoregulation of glomerular pressure is impaired in chronic renal disease, elevations in systemic blood pressure also are associated with increased glomerular capillary pressure. Glomerular hypertension results in increased protein filtration and endothelial damage, causing increased release of cytokines and other soluble mediators that promote replacement of normal kidney tissue by fibrosis. An important factor contributing to progressive renal disease is activation of the renin-angiotensin system, which not only tends to increase blood pressure but also promotes cell proliferation, inflammation, and matrix accumulation.

Keywords: hypertension, renal disease, fibrosis

CPAP in obstructive sleep apnea

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Obstructive sleep apnea (OSA) is present in a significant proportion of the population, but the majority of patients remain undiagnosed. OSA has very distinct symptoms. The most typical symptom is loud snoring during sleep. The snoring is often interrupted by silence followed by gaps. The most common treatment for Obstructive Sleep Apnea is Continuous Positive Airway Pressure (CPAP). This machine has been amazingly successful in reducing & preventing Sleep Apnea, as well as the loud snoring that usually accompanies the sleep disorder. CPAP is also approved by Food & Drug Administration. There are several CPAP manufacturers that offer different types of

machines with different features. Once you have been diagnosed with sleep apnea and have been prescribed CPAP therapy, you may be able to choose one machine among the many offered. Doctors use CPAP to treat people who have Moderate to Severe sleep apnea. CPAP is the treatment of choice for people who have sleep apnea and Coronary Artery Disease (CAD) or Heart Failure.

Keywords: CPAP, obstructive sleep apnea, treatment, sleepiness

POSTER PRESENTATIONS

Morphological alterations of mouse liver after xenobiotic administration

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Xenobiotics are chemicals foreign (xeno) to living organisms. These substances are not produced nor naturally occur in the body. Xenobiotics include drugs, pesticides and carcinogens. For example, antibiotics can be considered as xenobiotics in a human body because the human organism does not contain them or produce them naturally. Being a major location of xenobiotic metabolism, the liver plays a central role in preventing the accumulation of diverse compounds by turning them into a form suitable for elimination. Due to the fact that the process of xenobiotic metabolism mediate toxic responses, the liver is potentially susceptible to injuries and morphological changes while performing its function. Through transmission electron microscopy, an essential method in ultrastructural research, we described xenobiotic induced basic ultrastructural reactions of liver parenchymal cells. TEMs are capable of imaging at a significantly higher resolution than light microscopes. This enabled us to examine fine details concerning the hepatocyte. The frequent ultrastructural modifications reveal an increase of smooth endoplasmatic reticulum vesicles, an increase of lipid drops, an increase of smooth endoplasmatic reticulum vesicles, abnormal shaped nucleus with heterogeneous chromatin, possible rarified cytoplasm with mitochondrial injury, a large number of Kupffer cells, possible increase of peroxysomes number due to mitochondrial damage and formation of intracellular myelinic figures.

Keywords: xenobiotics, CCl₄, smooth endoplasmatic reticulum, number of lipids drops, mitochondria injury / myelinic figures.

Botanical Gardens in the European Union and ex situ conservation

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Many botanical gardens in the European Union are also elite institutions worldwide significance in botanical research, plant conservation, education and horticulture. They include more than 100 germplasm banks, which not only conserves collections of spontaneous, but also species of agricultural interest, being one of the most important genetic reserves in the world. Botanical gardens have played an important role in many cultures and civilizations throughout the ages. They fulfill various roles and functions so that it is not easy to define what a botanical garden. However, a convenient definition is that they are institutions which documented collections of living plants kept for purposes of scientific research, conservation, monitoring and education Botanic Gardens Conservation International 1999. Strengthening the major centers of botanical gardens as systematics and taxonomy research in plant taxonomy provides the basis for all applied and integrated approaches to science and plant species and habitat protection or management programs. The importance of placing the subject in numerous taxonomic and conservation of biological diversity permissive custom has been made in the Global Taxonomical Initiative. Guarded and important documentary artifacts, structures and collections of historical and cultural heritage is a rich and varied extensive collections held in botanic gardens. An important biological inheritance is kept in an extensive collection of botanical gardens, plants, bringing together plants from widely separated locations and often inaccessible to study in controlled conditions. Promote botanic gardens as a tourist attraction in most countries with well-developed botanical gardens regard as important tourist wealth. Many now rely on income from visitors who pay to visit these gardens. Larger institutions have sections of public relations and marketing who employ trained personnel, but in smaller gardens such promotion is carried out by untrained employees specifically for this work.

Keywords: conservation, gardens, E.U.

Aspects of therapeutic management in patients with Metabolic Syndrome

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In the past 10 years, the enormous increase in interest granted to the metabolic syndrome on the one hand due to the increased prevalence of metabolic syndrome caused mainly by epidemic increasing of obesity, and secondly because of growing data which gives the status of precursor cardiovascular disease and diabetes mellitus. In the treatment of metabolic syndrome, the main goal is weight loss and intra abdominal fat. Differentiated and aggressive treatment of metabolic syndrome components result in loss of objectivity or even regression of atherogenesis and atherothrombotic events decrease. Monotherapy remains in most cases a goal, both because of the length of treatment and the frequent coexistence of dyslipidemia with various cardiovascular diseases and / or dismetabolic. Metabolic Syndrome is a public health problem in contemporary society. Patient sex could be relevant given that women are more prone to this condition, especially after menopause. The association between statin and calcium blocker, both classes of drugs having experienced back in studies regarding influencing atherogenesis process is preferable than treatment with each class.

Keywords: management, obesity

Syncope in the elderly patient – etiology and differential diagnosis

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In the elderly population, syncope is a multifactorial pathology. There is a broad etiology of syncope that includes cardiovascular, neurological, metabolic, and situational causes, but the most severe causes are the cardiovascular ones. The differential diagnosis in syncope is crucial for the prevention of long-term morbidity and mortality. The differential diagnosis comprises benign causes, but also life-threatening conditions, thus the evaluation of this pathology is of utmost importance. There are basically three types of syncope: vasovagal (neurocardiogenic) syncope, which is the most common type due to an altered vascular tone, cardiogenic syncope – which usually occurs linked to situations such as arrhythmias and orthostatic hypotension and neurologic

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syncope due to migraines, cerebrovascular hemorrhage or infarction. This paper is an overview of the current data in the literature on the etiology and differential diagnosis of syncope in the elderly (which includes seizures, hypoglycemia, drop attacks, transient ischemic attacks and stroke and psychological causes – anxiety, hyperventilation, panic attacks) compared with data from a study on a number of patients with anamnestic syncope that have been admitted in the Internal Medicine Department of Spitalul Municipal in Arad during a period of six months.

Keywords: syncope, elderly, orthostatic hypotension, seizure, iatrogenic

The mediterranean diet

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This paper is meant as a close look at the features and foods of the Mediterranean Diet, recognized by the UNESCO as an Intangible Cultural Heritage in seven countries bathed by this sea and as a great contribution to the world. This diet is not only a way of eating; it actually is more appropriate to say it is a way of life because, in the last twenty years, dozens of researches have confirmed it a gold standard, not only in a healthy nutrition, but also for its life-long benefits. In this scientific essay we will focus on those foods which make this diet one of the most common and furthermore on why it is much appreciated by doctors and nutritionists all over the world, especially when it is adopted by people that usually followed a so-called "Western" diet (popular in U.K., U.S.A. and frequently exported in all the industrialized countries by the well-known Fast Food culture). Last, but not least, we'll discuss the benefits and risks in the excessive use of the Mediterranean Diet, its usefulness in weight-loss strategies and we'll list the most important studies on this interesting topic.

Keywords: mediterranean, diet, healthy, foods, nutrition.

The bionics of walking

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In the past few years a number of voices have questioned this benevolent view of the effects of technology upon

society. This unease has percolated through to medicine has generally questioned the role of technology in medical science and its impact upon individuals. However, these ideas have started to be specifically applied to individual technological developments and their implications spelled out. This then is the purpose of this poster; to question the role of technology with regard to the development of walking appliances for paraplegics as outlined in this poster. The assumptions behind the poster referred to above and it describes stem from the view of technology as a benevolent and beneficial force. When this attitude is coupled with the notion that being in a wheelchair inevitably means immobility and that walking, however ineffectively, is preferable to propelling a wheelchair, than a number of inaccuracies, half-truths and misconceptions are put forward to justify the project at hand. The assumption that the walking appliance may also reduce some of the physical disadvantages of being confined to a wheelchair may be a misconception. Indeed, technology has proved ineffective and inefficient in modifying individuals and there is little evidence for great future advances. The 'Six Million Dollar' Man is not science fiction based on projected facts but modern day fairy tales, till now, as I will not say these all will be possible in the near future. It could be argued that the only significant development this century was anti-technological; that is the decision by Sir Ludwig Guttmann to treat the paraplegic as he was – paralyzed – and to cease attempts to repair or replace his damaged spinal cord by surgical intervention. Thus, it is our contention that technology should be used in the service of man rather than for the modification of man.

Keywords: bionics, muscles, development, technology.

SUB-SECTION IV.4 – Section des chercheurs francophone

ORAL PRESENTATIONS

Les pathologies de l'ADN mitochondrial

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La taille relativement petite du génome mitochondrial humain fut la cible attractive de projet de séquençage dans les années 80. Sa séquence complète de 16 569 nucléotides fut donc publiée. L'ADN mitochondrial, molécule circulaire, code ainsi pour 22 gènes d'ARN de transfert mitochondriaux, deux gènes d'ARN ribosomiques, et 13 gènes codant pour les sous unités polypeptidiques des complexes intervenant dans la chaîne respiratoire. L'identification de mutations dans le génome mitochondrial responsables de myopathies est assez récente. Ainsi les recherches ont montré que ces maladies sont de transmission purement maternelle. En réalité, on retrouve de nombreux cas de transmissions sporadiques dus à une mutation de novo dans le génome mitochondrial. Les pathologies mitochondriales sont des maladies de présentation extrêmement variables, se présentant à tout âge. Tous les tissus et organes peuvent être atteints mais ceux ayant des besoins énergétiques les plus importants le sont en priorité (cœur, muscles squelettiques, cerveau).

Keywords: humain, ADN mitochondrial, mutation, chaîne respiratoire, métabolisme pathologique, Syndrome de MELAS, Syndrome de MERRF, Syndrome Kearns-Sayre, Ophtalmoplégie progressive, myopathie oculaire

Traitement d'un AVC ischémique en phase aiguë

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L'accident vasculaire cérébral ischémique est une affection cérébrale aiguë, causée par l'occlusion localisée d'un vaisseau irriguant le cerveau. En quelques heures, voire quelques minutes, on observe des déficits neurologiques focaux secondaires un ramollissement tissulaire. Avec 120.000 nouveaux cas par an en France, l'AVC ischémique représente la 3ème cause de décès chez l'adulte. Son incidence augmente avec le vieillissement général de la population en Europe et le budget de la santé accordé au traitement de cette maladie

dépasse 7%. La prise en charge rapide, d'un délai inférieur à 6 heures après un AVC ischémique, par une équipe pluridisciplinaire, si possible en USINV (unité de soins intensifs neurovasculaires) permet de réduire significativement l'étendue de la zone infarctée et de prévenir le patient contre une autre attaque. Les performances du scanner sans injection ou de l'IRM permettent d'écartier une hémorragie cérébrale et de préciser la nature ischémique de la lésion. Avant tout, une surveillance rapprochée et continue par monitoring des fonctions vitales du patient est indispensable. Le traitement, essentiellement médicamenteux, comprend selon l'étiologie de la maladie, des antiagrégants plaquettaires (Aspirine 160 à 325 mg en dose d'attaque), des anticoagulants (HBPM et AVK) et si le délai de l'AVC est inférieur à 3 heures, une thrombolyse intraveineuse (rt-PA) mais dont l'usage est limité par de nombreuses contre indications.

Keywords: AVC ischémique ; Aspirine ; thrombolyse ; IRM ; ramollissement

La médecine nucléaire un espoir contre le cancer

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La médecine nucléaire est une spécialité médicale qui utilise des éléments radioactifs dans le but de diagnostiquer ou de traiter des maladies. C'est un examen de type imagerie. On appelle médecine nucléaire l'étude d'un organe ou d'un tissu au moyen de traceur radioactifs dans le but de suivre son fonctionnement afin de déceler d'éventuelles anomalies. Cette discipline fait partie de la catégorie des examens dits d'imagerie médicale, tels la radiographie, l'IRM, le scanner ou l'échographie. Les examens de médecine nucléaire font partie du bilan complémentaire demandé par votre médecin afin de l'aider à rétablir un diagnostic de votre pathologie. De nos jours, la médecine nucléaire a un rôle importante dans la prise en charge des cancer. Les méthodes de détections de "corps entier" de la médecine nucléaire sont parfaitement adaptées à la distribution de la maladie cancéreuses. Cependant, même si les médecins jugent qu'il y a un certain risque, la médecine nucléaire va surtout sauver des vies et retarder des issues fatales! Le cancer est une maladie caractérisée par la prolifération anormale de cellules au seins d'un tissu normal de l'organisme, ce qui va donc tendre à menacer la survie du tissu. La médecine nucléaire est fondée sur la détection, le diagnostic des cancer et l'évaluation de leur extension. L'appareil de base est une caméra à scintillation, fixe ou

mobile sur des rails et équipée d'un ou plusieurs détecteurs à grand champ rectangulaire.

Keywords: medecine nucleaire, cancer

Intérêt de l'administration d'héroïne "supervisée" pour les héroïnomanes en situation d'échec thérapeutique

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L'héroïne ou diacétylmorphine est un opiacé obtenu à partir de la morphine qui provient elle-même de l'opium. Neuf millions de personnes à travers le monde consomment régulièrement de l'héroïne. Cette substance peut engendrer une dépendance très rapide et très forte. Elle agit au niveau du cerveau au niveau de récepteurs particuliers, les récepteurs opioïdes. De nombreuses recherches ont été menées pour tenter de traiter les dépendances à l'héroïne. Actuellement, la Méthadone et le Subutex sont majoritairement utilisés dans les centres de désintoxication. Depuis quelques années, des études voient le jour, notamment en Suisse et au Canada. Ces recherches ont pour but d'étudier l'éventuelle efficacité d'un traitement des héroïnomanes par une utilisation conjointe d'héroïne et de méthadone. Ce traitement serait destiné aux toxicomanes ayant rechuté à plusieurs reprises. Les premières résultats sont particulièrement encourageants et ouvrent de nouvelles possibilités quant au traitement des toxicomanies.

Keywords: l'administration d'héroïne "supervisée", héroïnomanes

Maladie astrocytaire: la maladie d'Alexander

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La maladie d'Alexander, sera l'objet de notre étude. Cette maladie grave qui touche essentiellement les enfants est de forme rare puisqu'elle affecte moins d'une personne sur cent mille soit en France environ sept naissances par an. Cependant, cette maladie neuropathologique ou plus précisément leucodystrophique éveille l'intérêt et la curiosité de nombreux chercheurs étant donné que la maladie n'est pas encore bien diagnostiquée ni traitée avec efficacité. De plus, bien que beaucoup plus fréquente en bas âges, elle peut être infantile, juvénile, ou adulte, et selon les cas les symptômes ne sont pas les

mêmes. La maladie a été mise en évidence pour la première fois par Alexander en 1949. Après l'autopsie du sujet étudié, de nombreux corps homogènes ont été retrouvés on les appelle aujourd'hui fibres de Rosenthal. On a pu également identifier un gène en particulier responsable de cette maladie, codant pour la protéine gliale fibrillaire acide, dont le rôle au niveau de certaines cellules gliales en particulier est primordial. Cette maladie, à une échelle cellulaire atteint le réseau astrocytaire et les gaines de myéline du système nerveux central ces deux composants étant étroitement liés et attirant la convoitise de nombreux scientifiques puisqu'étant responsables de nombreuses autres maladies neurologiques.

Keywords: astrocytes

La sclérose en plaque: maladie orpheline

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As the World Multiple Sclerosis Day is on June 25th, let's highlight this rare orphan disease on which the pharmaceutical industry pays little interest. Multiple sclerosis affects about 2.5 million people worldwide. This chronic autoimmune disease of the nervous system affects mainly young adults, predominantly women. From a pathophysiological point of view, it deals with an inflammatory demyelinating nerve center which are characterized by patches of small sized sclerosis scattered in more or less convolutions on the surface of brain and spinal cord. It can affect the white matter of the brain, cerebellum, brainstem, medulla or spinal cord. The evolution of the disease leads to a progressive motor disability. From a clinical perspective spastic paraplegia, the intention tremor, nystagmus are the most consistent manifestations of this disease which develop slowly by consistent outbreaks. Nowadays, doctors are unable to cure patients suffering from this disease. However, some treatments can slow down the growth of the disease, prevent relapses and reduce the intensity and duration of the symptoms. Many molecules are used in order to reduce specific symptoms such as beta-interferon. However side effects are not negligible. Thus, multiple sclerosis is an unpredictable and bad-known disease whose origin remains mysterious, with uncertain treatments.

Keywords: sclérose en plaque, maladie orpheline

Behavioral study of famous personalities: decryption of our society's figureheads

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Famous celebrities are personalities grouped together in all times and all domains. Thus, we define first the notions proper to behavioral sciences of personality, character and temperament. With a behaviorist point of view, we can interest ourselves to people who built the History, like Napoleon, Hitler, Stalin and John F. Kennedy, the great masters of the Art's domain, as Dali, Beethoven and Kitano, more contemporary personalities, such as Nicolas Sarkozy and Muammar Khadafi, and even some fiction's character, like Anakin Skywalker, whose very serious analysis has been surprisingly topic for a lot of debates. By covering all those very different domains, we ask ourselves the reasons for such a popularity, in the past as much as in the present, of those people who fascinated and keep fascinating our society, leading us to wonder if those celebrities are the figureheads of our society, the image we want to project, or its mirror, the image it sends back to us.

Keywords: behavioral study, society figureheads

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