

ABSTRACTS

Part “Medicine”

THE CHANGING THERAPEUTIC LANDSCAPE OF CASTRATION-RESISTANT PROSTATE CANCER

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Abstract:

Castration-resistant prostate cancer (CRPC) has a poor prognosis and remains a significant therapeutic challenge. Before 2010, only docetaxel-based chemotherapy improved survival in patients with CRPC mitoxantron loosed its first line indication. The improved understanding of the underlying biology of CRPC introduced a new era in molecular anticancer drug development. Many novel anticancer drugs for CRPC entering the clinic and the study protocols. These include the novel taxane cabazitaxel, the vaccine sipuleucel-T, the CYP17 inhibitor abiraterone, the novel androgen-receptor antagonist MDV-3100 and the radioisotope alpharadin. On this way the management of patients with CRPC is changing. Relevant for the newer therapy pathways is the understanding of the novel different mechanisms that render PCA castration resistant and elaborate on the nonchemotherapy approaches evolving in CRPC. These include agents targeting the epidermal growth factor receptor, endothelin receptor antagonists, angiogenesis inhibitors, immunomodulatory agents, immunotherapy, novel antiandrogens, and delivery of cytotoxic agents via therapeutic antibodies. The identification of newer therapies in this setting affirming our steady movement towards better disease control. We discuss about treatment pathways and schedules for patients with CRPC and consider strategies to optimize the use of these agents, including the incorporation of predictive and intermediate end point biomarkers, such as circulating tumor cells.

EPIGENETIC AND METABOLIC CARDIOVASCULAR RISK FACTORS

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Abstract:

Epigenetic is relatively new branch of medicine aiming to explain on a molecular level how environmental factors can modify genetic programming of the organism. The new-acquired phenotypic traits could thereafter be transmitted to the offspring. The role of DNA methylation and acetylation, histone modification, the role of micro-RNAs etc. as main players in epigenetic processes are increasingly recognized, especially in oncology, and new epigenetically acting drugs are already introduced in practice. We are only in the beginning of our understanding how epigenetic factors could impact the development of obesity, hypertension, carbohydrate and lipid disturbances, and atherosclerosis. The study and evaluation of epigenetic factors and their effect could be a powerful tool for combating cardiovascular diseases.

Key world: epigenetic, obesity, hypertension, atherosclerosis

DEATH CASES FROM HEROIN OVERDOSE – FIVE -YEAR INVESTIGATIONS (2007-2011)

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Abstract:

The purpose of this study is to analyse all autopsied cases from 2007 to 2011 year (5 years), died from heroin overdose. We investigated 13 cases. In all cases the chemical analysis found morphine, the active component of heroin after hydrolyses. There were in some cases alcohol and benzodiazepines, also traces of marijuana, barbiturates or amphetamines.

Key words: heroin overdose cases, chemical analysis, review

SUDDEN INFANT DEATH SYNDROM

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Abstract:

Sudden death in babies is unclear yet. There are more than 120 theories for Sudden Infant Death Syndrome (SIDS). We examined 17 babies from one month to one year. We performed crime scene investigation, forensic autopsy and histopathological observation. The microscopical examination of the lungs in most babies revealed microhaemorrhages in alveoles and interstitium, congestion, oedema, pulmonary emphysema, atelectases, haemosiderin-laden macrophages. Some authors considered these changes as "typical" for SIDS. There was a cystic transformation in gl.thymus, diminished number of Hassall's corpuscles and in one case – a lot of Hassall's corpuscles, but with cystic degeneration and associated phagocytosis by macrophages ("starry-sky" spaces) – features for acute or accidental involution.

USE RICH PLATE PLASMA IN PERCUTANEAL SUTURE OF THE ACHILLES TENDON - IMAP 2012

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Abstract:

We present our study including the 10 athletes operated with percutaneous suture and use PRGF. The mean age of donors was 33.7 ± 5.2 years. Our results showed range of motion earlier (8-10 weeks) no wound complications and short period for recovery and patient satisfaction and activities.

Conclusions: percutaneal suture combined with RPP therapy present new possibilities for healing and functional recovery

Key words: Achilles tendon, RPP, surgical repair

SCREENING FOR POST STROKE COGNITIVE IMPAIRMENT VIA MMSE AND MOCA.

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Summary:

Objective: The aim of our study is to examine cognitive performance after mild stroke via MoCA (Montreal Cognitive Assessment) and MMSE (Mini Mental State Examination) and to compare the results.

Contingent and methods: We examined 54 patients with mild stroke (aged 52 to 72 (mean 63.17, SD 5.9582); 34 were males and 20 were females) and 54 controls, adjusted by age, sex and education level. All subjects were tested via MMSE (Bulgarian version) and MoCa (Bulgarian version). Data was collected in the single step model at the 90th day after the stroke incident for patients and at the day of obtaining informed consent for controls. Statgraphics Plus 5.0. was used for statistical analysis.

Results: Patients have poorer performance on both MMSE and MoCa than controls. MoCa has comparatively good discriminative validity and sensitivity.

Conclusions: Although MMSE is one of the classical screening tools for cognitive impairment widely used in Bulgaria, other screening tools should not be ignored. On the basis of our results, MoCa is also a good screening instrument, especially for post stroke cognitive impairment.

THE IMPACT OF COMORBIDITY ON COGNITIVE PARAMETERS AFTER ISCHEMIC STROKE.

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Summary:

Objective: The aim of our study is to examine the impact of comorbidity on cognitive parameters after the first ever ischemic stroke.

Contingent and methods: We examined 112 patients (aged 46 to 84 (average 66.67, SD 5.9582), 69 males and 43 females) with first ever ischemic stroke. For cognitive assessment we used Mini Mental State Examination (MMSE), 10 word test (for short term memory and delayed recall), Isaack's test for verbal fluency (VF), Geriatric depression scale (GDS), Hamilton depression scale (HDS), Blessed dementia information memory concentration test (revised, BDIMCT), Benton Visual Retention test (A,E; BVRT) – number of corrects and number of errors and Wisconsin Card Sorting Test (number of errors, WCST). The patients were examined on two step model. At acute stage, after collecting medical history, somatic and neurological examinations, MMSE, 10 words test and HDS were applied. At subacute stroke stage (90 \pm 5 days after first stroke symptoms), all cognitive tests were used. „STATGRAPHICS Plus 5.0 (free version)“ was used for statistical analysis.

Results: Chronic ischemic heart disease and chronic obstructive pulmonary disease are the most important additional risk factors for cognitive decline. Thyroid pathology, renal failure and anaemia are independently associated with poststroke depression.

Conclusions: On the basis of these data we can conclude that vascular risk factors are independently associated with cognitive and emotional changes after stroke and their effects should be assessed and taken into account for subsequent treatment of stroke survivors.

Key words: comorbid diseases, post stroke depression, post stroke cognitive impairment, vascular risk factors.

ON DIFFERENTIAL DIAGNOSIS BETWEEN AUTISTIC DISORDER AND ASPERGER'S SYNDROME

St. Todorov. M. Arnaoudova

The differential diagnosis between Autistic disorder (AD) and Asperger's syndrome (AS) in most cases is quite difficult since most of the symptoms are clinically undistinguished. Several factors complicate the diagnosis of AS- an autism spectrum disorder (ASD). It is considered by some authors to be simply a milder version of autistic disorder. Problems in diagnosis include disagreement among diagnostic criteria, controversy over the distinction between AS and other ASD forms or even whether AS exists as a separate syndrome, and over- and under-diagnosis.

Our paper is based on the diagnostic and differential diagnostic criteria of DSM-IV, ICD-10 and our clinical experience.

In the process of diagnosis and differential diagnosis we, naturally, illustrate and discuss the similarities and differences between the two disorders.

Key words: autistic disorder, Asperger's syndrome, differential diagnosis

SOME ASPECTS OF THE AGGRESSIVE ACTS, COMMITTED BY SCHIZOPHRENIC PATIENTS, TRIGGERED BY SOME PSYCHO-TRAUMATIC FACTORS

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The achievements of the contemporary psychopharmacology enable the out-patient treatment of schizophrenic patients, thus let them living in their usual social environment- family, relatives, neighbors, friends.

In this connection, the real conditions of patients' micro-social environment play an important role- either stimulating their compensatory mechanisms, or exercising negative impact on their adaptation and behavior.

We examined 30 schizophrenic patients (22 males, 8 females), who have committed aggressive acts, triggered by psycho-traumatic situations with different sensible content, originating from their micro-social environment.

Dominant were family conflicts, followed by conflicts with the neighbors. The aggressive acts were directed to concrete persons, from the close neighborhood, involved into the psycho-traumatic situations. Studying and evaluation of the aggressive acts, triggered by psycho-traumatic factors play an important role for their prevention

Key words: aggression, schizophrenia, psycho-traumatic factors

PERSISTENT GENITAL AROUSAL DISORDER IN ELDERLY WOMEN: DIAGNOSIS AND TREATMENT. A CASE-STUDY

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Persistent genital arousal (PGAD) is an unusual, rarely diagnosed but a real problem for some women which causes considerable physical and psychological distress. It is characterized by physiological signs of sexual arousal that persist despite the absence of sexual desire. A number of theories have been proposed and various psychological and medical treatments have been used to treat this condition with varying success.

The problem is even more serious with elderly women. In our clinical practice we have met a number of patients with such complains, which we have discussed mostly in terms of depression, panic disorder or SSRI's application.

In our paper we discuss some diagnostic and therapeutic issues and present a case of a 71 years old woman, who experienced distinct symptoms of PGAD for nearly 10 years. She was treated with a number of antidepressants and benzodiazepines without effect. Olanzapine 5 mg at bed time was administered. A good therapeutic response was achieved from the same evening and was held at the hospital stay and afterwards.

Key words: PGAD, diagnosis, treatment

ASSESSMENT AND MANAGEMENT OF BEHAVIORAL PROBLEMS IN VASCULAR DEMENTIA

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Behavioral disorders in dementia are troublesome and impact the family, caregivers, nursing or hospital staff. A number of strategies have been developed to reduce that burden.

The assessment of demented patients is complicated by the fact that patients are usually unable to express reasons for their feelings and behavior. It is important the type and frequency of behavioral symptoms to be assessed and described and, if possible, the underlying basis of the target symptom to be determined.

In our paper we discuss the most burdensome behavioral symptoms in vascular dementia and on the basis of our knowledge and clinical experience we propose different treatment solutions- pharmacological or non pharmacological. We point out that non pharmacological solutions are usually applied to milder behavior problems, while others-without environmental trigger that are severely distressing for caregivers, may require additional pharmacotherapy.

The optimal therapeutic results require knowledge, training and experience with such a group of demented patients.

Key words: behavioral symptoms, vascular dementia, assessment, management

HYDATID DISEASE OF THE LIVER IN CHILDREN-DIAGNOSIS AND TREATMENT

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Abstract

Between 1990 and 2011, 168 children (102 boys and 66 girls) had surgery for hydatid disease of the liver. Their mean age was 10.5 years (range 3-12). Abdominal distention with a mass was the commonest presenting symptom (71.4%), followed by abdominal pain 38%. Hepatomegaly with a palpable mass was present in 57%. The diagnosis was established clinically, serology and imaging techniques. At surgery, 111 children had a single cyst, 69 of which were in the right lobe of the liver. Ten children had multiple cysts occupying both liver lobes. 120 forms of surgical treatment were used: capitonnage + partial excision of fibrous capsule; total excision of the cyst; and external drainage of the cyst cavity. Ten children required re-operation. Mean follow-up time was 24-60 months. There were no deaths, but five children developed post-operative complications. Surgical treatment in the form of primary closure of the cyst cavity without drainage seems to offer the best therapeutic option for patients with large hydatid cysts. All patients received a post-operative course of mebendazole (50 mg/kg/day) for between 1 and 8 weeks.

SINGLE AGENT DOCETAXEL AS SECOND- LINE CHEMOTHERAPY FOR PRETREATED PATIENTS WITH RECURRENT NON- SMALL CELL LUNG CANCER

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ABSTRACT:

Objective: Single agent Docetaxel is a standard therapy for patients with non- small cell lung cancer after the failure of platinum- containing regimens. The aim of this study was to explore the efficacy and safety of Docetaxel monotherapy as second- line chemotherapy in pretreated patient with inoperable non- small cell lung cancer.

Methods: From January 2005 to May 2008 thirty- six consecutive patients with locally advanced or metastatic morphologically proven stage IIIB/ IV non- small cell lung cancer entered the study after failure of previous platinum- based regimens. Treatment schedule consist of Docetaxel 75 mg/m² administered every three weeks with repetition after 21 days with Dexamethasone premedication.

Results: Overall response rate, median time to progression and median survival was 16,6 %, 5,6 months and 4,5 months respectively. The main hematological toxicity was neutropenia.

Conclusions: That data suggest that single agent Docetaxel remain reasonable choices for the chemotherapy in pre-treated patients with non- small cell lung cancer.

Key words: Docetaxel, Non- small cell lung cancer, Second- line chemotherapy

OUR EXPERIENCE WITH ZOLEDRONIC ACID IN THE TREATMENT OF PATIENTS WITH NON SMALL CELL LUNG CANCER AND BONE METASTASES

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ABSTRACT:

Objective: Bone metastases occur in 30- 65% of patients with lung cancer. The aim of this study was to assess the efficacy and safety of Zoledronic acid, a third generation biphosphonates, in patients with non small cell lung cancer and bone metastases. **Methods:** Among May 2004 and December 2008 fifty three consecutive patients with inoperable non- small cell lung cancer and bone metastases was evaluated. Zoledronic acid was administered at dose 4 mg every 3- 4 weeks as rapid intravenous infusion. All patients were treated with combination chemotherapy too. **Results:** After the treatment with Zoledronic acid was observed significant reduction of serum calcium level. Serum alkaline phosphatase also decreases but not significantly. With regard of clinical efficacy 36 of patients stabilized or reduced their needs for analgesic treatment. No grade 4 side effects were recorded. **Conclusion:** Zoledronic acid as intravenous rapid infusion is safe and convenient in the treatment of patients with non- small cell lung cancer and bone metastases.

Key words: Zoledronic acid, Non- small cell lung cancer, Bone metastases

DEPENDENCE BETWEEN REACTION TIME AND H-REFLEX AMPLITUDE CHANGES DURING PERFORMANCE OF A SIMPLE MOTOR TASK IN THYROTOXICOSIS PATIENTS

The authors examine the dependence between reaction time as an indicator of change at cerebral level and H-reflex amplitude change being a relative index of excitability level in the spinal cord during the preparation of a simple voluntary movement in thyrotoxicosis patients. They are diagnosed on the basis of anamnesis, clinical examination, hormonal dosage, thyroid gland echoscopy, etc. Electrophysiological investigations are carried out after identifying the disease and prior to the beginning of causal therapy. Patients are comfortably seated on a chair in a dark room and respond to light signal from a blitz-lamp. According to preliminary instruction, motor response consists in right heel lifting from a button with maximal speed. Button is linked with an apparatus for reaction time measurement. It is started simultaneously with light signal presentation and then stopped when heel is lifted from the button. Simultaneously with light signal presentation, n. tibialis in the popliteal fossa of the same leg is excited to evoke H-reflex. It is registered from the lateral belly of m. gastrocnemius of the leg. This muscle is an agonist of forthcoming voluntary movement. One-day signal programme consists of a total of 120 light signals divided into three equal blocks. Prior to and after every block H-reflex is fourfold evoked without light signal presentation. Mean amplitude value of these H-reflexes is considered a control H-reflex amplitude at rest. H-reflex amplitude evoked only once for every light signal is compared with control H-reflex amplitude. Its decrease or increase is read. Reaction times are grouped according to the extent of corresponding H-reflex amplitude increase or decrease. Data obtained serve to construct relation curve between reaction time and H-reflex amplitude changes. This relation curve differs in nature from the curve when healthy subjects under the same experimental conditions are tested.

DISTRIBUTION OF ⁸⁶RUBIDIUM AND METHIONINE ⁷⁵SELENIUM IN RATS' ORGANS AFTER PHYSICAL STRAIN AND TREATING WITH PROTEIN HYDROLYSATE AND VITAMIN C

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Purpose of the study was to track changes in blood flow and metabolism in 15 organs of experimental rats subjected to severe physical strain and treated with protein hydrolysate and Vit. C. Animals are divided into one control and 4 experimental groups. After swimming for 30 minutes they have been treated with these products and methionine ⁷⁵selenium and then after another 2 hours and repeated swimming – with ⁸⁶rubidium. After being euthanized with thiopental and an autopsy being performed, the following organs are taken: pancreas, spleen, testicles, duodenum, part of small intestine and colon, adrenals, kidneys, liver, lungs, heart, aorta, a piece of muscle, a part of a brain and stomach. Determining of the percentage of activity per gram of tissue, total injected activity of the two isotopes of each of the organs is carried out and the results are compared. Physical strain deteriorates blood flow and reduces the accumulation of methionine ⁷⁵selenium, whereas treatment with the hydrolyzate and Vit. C has a beneficial effect in almost all organs.

THE HARMONIC SCALPEL USE IN THYROID SURGERY

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New modern resection instruments have been introduced for use in the surgical treatment of thyroid diseases in recent years.

Objective: To present our experience of using the harmonic scalpel in thyroid surgery.

Patients and methods: During the period from 2008 to 2011, 1398 patients with various thyroid pathology (aged from 6 to 74 years), have been operated on in our clinic. In 583 of the cases, the resection was performed through the classic Kocher incision, in 641 through a minimal incision open access and with the assistance of a video technique in the 174 of the cases. All patients were operated on with the harmonic scalpel (Ethicon EndoSurgery Care). Length of the surgical incision, use of hemostatic instruments and ligatures, extent of the resection, use of drainages, operative time, intra- and postoperative complications and length of the postoperative hospital stay were examined.

Results: The extent of resection ranged from isthmusectomy to thyroidectomy. All the operations were performed without the use of ligating instruments and sutures. Absence of bleeding and up to 45 % shortening of the operating time was revealed. The need for draining was significantly less, regardless of the volume of resection. There was no increase in the frequency of the intra- and postoperative complications. A significant decrease in the postoperative hospital stay was also achieved.

Conclusions: We believe that the use of harmonic scalpel changed the design of thyroid surgery by providing a reliable and safe hemostasis, shortening the operative time and improving the cosmetic results.

Key words: thyroid surgery, thyroid resection, harmonic scalpel.

MINIMALLY INVASIVE OPEN THYROIDECTOMY IN THYROID CANCER WITH COEXISTENT HASHIMOTO THYROIDITIS

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One of the minimally invasive thyroidectomy challenges is the application of this technique in the surgical treatment of thyroid cancer. The use of minimally invasive open approach in coexistence of thyroid cancer and Hashimoto thyroiditis is well known provocation to the skills of the surgeon working in the field of thyroid surgery.

Aim: To report our results and to present the capabilities of minimally invasive open approach in the surgical treatment of thyroid carcinoma and coexistent Hashimoto thyroiditis.

Patients and methods: For the period 2008-2011, 641 patients were operated on in our clinic using minimally invasive open approach. In 32 of these patients presence of Hashimoto thyroiditis was found in combination with the thyroid cancer. All patients were females, 26 to 46 years age. Patients were selected according to designed and accepted for our institution criteria. The procedures were performed using ultrasound (harmonic) shears (Harmonic Focus® and Harmonic Ace®, Ethicon Endo-Surgery). The operative time, the incidence, type and severity of complications, the length of hospital stay, the safety and reliability of the surgical procedure were analyzed.

Results: The operative incision length in all cases was between 2.0-2.5 cm. In 27 patients papillary thyroid carcinoma and in 5 patients – follicular variant of the neoplasm was found. The tumor size ranged between 0.5 and 1.5 cm. In all patients total thyroidectomy using harmonic scalpel was performed. Lymph node metastases in the central neck compartment were not found in any of the cases. The rate, type and severity of complications did not exceed those for patients who underwent conventional thyroidectomy. All patients leaved the hospital in the first 24 postoperative hours. The follow-up did not reveal remnant thyroid tissue in thyroid gland bed or recurrence of the disease.

Conclusions: Our results demonstrate the feasibility and reliability of minimally invasive open approach with harmonic scalpel in the surgical treatment of carefully selected patients with non-advanced thyroid cancer and coexistent Hashimoto thyroiditis

Key words: minimally invasive open thyroidectomy, harmonic scalpel, thyroid cancer, Hashimoto thyroiditis.

CAPABILITIES OF HARMONIC SCALPEL IN THE SURGICAL TREATMENT OF SECONDARY HYPERPARATHYROIDISM

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The significant changes in coagulation status during chroniodialysis, performed in patients with secondary hyperparathyroidism require the completion of meticulous surgical hemostasis in order to prevent active bleeding in the postoperative period.

Aim: To present our experience with harmonic scalpel application in the surgical treatment of secondary hyperparathyroidism.

Patients and Methods: 112 patients with secondary hyperparathyroidism (77 males and 35 females, aged from 23 to 60 years) had been operated on in our institution for 10 years period. All patients were on chroniodialysis. Hemostasis was achieved using conventional instruments and electrocautery in 46 patients and in 66 patients harmonic scalpel of Ethicon Endosurgery Care had been used. All patients had serum levels of parathormone above 2500ng/l. Ultrasonic examination revealed at least 2 parathyroid glands larger than 10mm in all cases. The amount of blood loss, necessity and type of drainages used, frequency of postoperative complications, postoperative hospital stay were comparatively evaluated.

Results: In 12 patients parathyroidectomy with autotransplantation was carried out, in 62 patients subtotal parathyroidectomy was performed. In the rest 35 cases- three of the parathyroid glands were removed (because of the impossibility to identify the fourth parathyroid gland, using ultrasonic and intraoperative methods). All patients were proven to have a sharp decrease in parathormone and Calcium serum levels. In the group of patients, where conventional instruments and electrocautery for hemostasis have been used, corrugated and tube drainages were applied as a rule. For the patients, in whom hemostasis was performed using a harmonic scalpel, simple glove drainages were used. In all patients in the pre-operative and post-operative period serial hemodialysis was done with LMW heparin administration. Significantly lower blood loss from the surgical wound was found in the group, where harmonic scission was used.

Conclusion: We consider that the application of harmonic scalpel in the surgical treatment of patients with secondary hyperparathyroidism on chroniodialysis leads to safer hemostasis, lower postoperative complications rate and thus shortens the postoperative hospital stay.

OCCULT HBV INFECTION

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Background and aim: Occult hepatitis B Infection (OBI) was defined with anti-HBc total(+)/HBsAg(-) serological status and detectable HBV DNA in the serum and/or in the liver. OBI was associated with very low viremia - serum HBV DNA < 1000 cp/ml (<200 UI/ml). Our previous studies suggested that 30% of blood donors and “healthy volunteers” in Sofia were anti-HBc total(+)/HBsAg(-). The prevalence of OBI widely varies in different studies. The aims of present study were to check the viral load and frequency of OBI in Bulgarian anti-HBc total (+) subjects.

Material and methods: We studied 31 anti-HBc total (+) and HBsAg (-) subjects (14 males); mean age

55,1 (\pm 15,3) years. All of them were tested for serum HBV DNA by real-time PCR assay (Applied Biosystems, USA) as well as for anti-HBs antibodies.

Results: OBI was found in 6/31 (19%) of subjects. It was observed in 5/13 of anti-HBs(-) individuals, while only 1/18 of anti-HBs(+) persons was with OBI. Serum level of HBV DNA was above 1000 cp/ml in all subjects with OBI. Two out of 6 had even HBV DNA level > 10000 cp/ml. A severe reactivation of HBV infection with reappearance of HBsAg and elevated ALT up to 18x above the ULN was observed in one out of 6 cases. The reactivation occurred during immunosuppressive therapy, despite of treatment with lamivudine. HBV DNA level in this patient was > 1000 cp/ml both in serum and saliva.

Conclusion: This is the first report of detectable HBV DNA in saliva during OBI. OBI was found mainly in anti-HBs-negative individuals. Some subjects with OBI were serum HBV DNA > 10000 cp/ml, which predetermines a high infectious risk.

THE BROAD DIFFERENTIAL DIAGNOSIS OF ORAL HYPERPIGMENTATION.

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Abstract

We present a case of 21-year-old male who was initially noted to have hyperpigmentation of gingival and buccal mucosa during routine dental cleaning. Further work-up revealed elevated transaminases. On the performed laboratory tests no liver etiology was found and liver biopsy was unrevealing. Over the course of two weeks his symptoms evolved and significant electrolytes abnormalities were noted which led to a diagnosis of Addison's disease. Shortly after initiation of steroid replacement liver enzymes normalized.

Oral pigmentation can be an early manifestation of a wide variety of conditions, including gastrointestinal and liver diseases and these patients should be promptly referred for further evaluation.

APHTOUS STOMATITIS AND VULVITIS IN A PATIENT WITH ULCERATIVE COLITIS AND HEPATITIS C: A DIFFERENTIAL DIAGNOSIS

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There is a wide differential diagnosis for aphtous stomatitis, including viral infections, medications and irritable bowel disease. We present a case of a 57-year-old woman with ulcerative colitis and chronic hepatitis C with recurrent painful aphtous lesions in the gingivo-buccal and genital areas. The ulcerative colitis has been in remission for the last 10 years. The patient occasionally takes Silymarin as a hepatoprotector. The oral and genital lesions usually occur simultaneously and she relates them to the intake of Silymarin. Peroral or topical Acyclovir alleviates the genital lesions. The oral lesions heal 5-7 days after discontinuation of Silymarin. We consider a relationship between the ulcerative colitis and the aphtous lesions unlikely. The effectiveness of specific antiviral therapy on the eruptions favours Herpes simplex as the probable etiological factor. There are no PubMed reports on the association between Silymarin and aphtous lesions or exacerbation of Herpes simplex infection. We do not exclude the possibility of a coincidence between the intake of Silymarin and the occurrence of the eruptions.

Key words: Aphtous stomatitis, aphtous vulvitis, ulcerative colitis, hepatitis C, Silymarin, Herpes simplex, differential diagnosis

CHARACTERISTICS AND IMPACT OF FUNCTIONAL GASTRO-ESOPHAGEAL SYMPTOMS IN PATIENTS WITH/WITHOUT DIABETES MELLITUS TYPE 2

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Nonerosive reflux disease (NERD) and functional dyspepsia (FD) are the most frequent upper gastrointestinal disorders now. Functional esophageal and gastric symptoms are also common in patients with diabetes mellitus (DM) type 2, but the differences of these symptoms in presence or absence of DM are still not clear. In this study we evaluated gastro-esophageal symptoms and compared the results in patients with NERD (group I, n=100), FD (group II, n=100), DM type 2 (group III, n=100), and healthy controls (HC-group IV, n=70), as well as the relationship between them and Helicobacter pylori infection, autonomic nervous alterations, and health-related quality of life (QoL). No significant difference between group I and III for heartburn and/or regurgitation frequency and severity was found. The dyspeptic symptoms were significantly more frequent and intensive ($p < 0.001$) in DM compared to the cases with NERD and FD ($p < 0.001$). The frequency of Helicobacter pylori infection was similar in groups I, II and III. Autonomic nervous alterations were also more frequent and intensive in cases with DM ($p < 0.001$) compared to the other groups ($p < 0.05-0.001$). Parasympathetic dysfunction was prevailing. The interference of reflux/dyspeptic symptoms on daily activities (Likert's score) was no different between groups. The QoL (including all domains) in patients with NERD and FD with or without DM was significantly lower than HC ($p < 0.001$) and similar to that in DM. In conclusion, dyspeptic, but not reflux symptoms are more severe in patients with DM, related to autonomic neuropathy, but all symptoms decrease quality of life.

Key words: Nonerosive reflux disease, functional dyspepsia, diabetes mellitus type 2, Helicobacter pylori

EFFECTIVENESS AND TOLERABILITY OF CUPRENIL IN BULGARIAN PATIENTS WITH WILSON'S DISEASE

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Cuprenil is the standard treatment of Wilson's disease (WD) but is associated with a spectrum of adverse events that can lead to its discontinuation.

The aim of this study was to evaluate the tolerance of Cuprenil intake in Bulgarian patients with WD

A total of 65 patients were included (males - 28, females- 37), mean age 34.2 ± 10.9 years. In 36 patients liver cirrhosis was present (22 - decompensated; 14 - compensated) and in 29 - acute/chronic hepatitis. Patients were treated with Cuprenil average dose 1025 mg/d at the clinic and followed-up for a mean period of 11.35 years.

Adherence to therapy was observed in 72% of cases. In 70% the level of urine copper excretion was effective (mean level - 8.34 ± 11.2 mkmol/24h.). The effect of Cuprenil on liver disease progression is as follows: while on treatment 73% of patients with decompensated liver cirrhosis maintained Child A class. In 86% of patients liver disease did not progress. Liver cirrhosis developed in 57% of patients with chronic hepatitis (50% - compensated disease; 7% - decompensated) on treatment. Oesophageal varices did not develop in 63% of patients with liver cirrhosis. Normalized level of the liver enzymes was observed in 58% of patients and platelets levels improved in 35% of patients on treatment. At the time of diagnosis 69% of patients had Kayser-Fleisher (KF) ring, during treatment reduction was observed in 26% of patients. At the time of diagnosis 2 patients had significant proteinuria, during treatment all patients reached non-significant levels (mean level 0.39 ± 0.29 g/24h). At the time of drug introduction 14% of patients had nephrolithiasis, 5% - interstitial glomerulonephritis, 5% - tubulopathy. While on treatment in 3 patients nephrolithiasis solved, in 1 patient - occurred and 1 patient developed tubulopathy with hypercalcemia and osteoporosis that required discontinuation of Cuprenil intake. One patient developed severe neutropenia shortly after starting Cuprenil that required dose reduction. In 2 patients dysgeusia and ageusia was observed shortly after Cuprenil commencement. In one case dose was reduced, the other patient received full dose due to severe neurological symptoms. Dysgeusia ameliorated over up to 4 months of Cuprenil intake.

Systematic treatment with Cuprenil is well tolerated and delays the natural course of the disease.

Key words: Wilson's disease, Cuprenil, dysgeusia

INTRAOPERATIVE ULTRASOUND EXAMINATION OF HILAR CHOLANGIOMATOSIS /TUMOR OF KLATSKIN /

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ABSTRACT:

Purpose: To compare the opportunities of the intraoperative ultrasound examination of the liver with the preoperative imaging methods – Computer tomography (CT), Ultrasound examination (US) in detecting hepatic lesions in patients with tumor of Klatskin (hilar cholangiocarcinoma).

Patients and methods: This is a prospective study of 7 patients, which had undergone open operative intervention for tumor of Klatskin. The affecting of the liver by the tumor process was examined preoperatively with Ultrasound examination and Computer tomography with contrast amplification, and by inspection and palpation and intraoperative ultrasound during the operative intervention.

Results: The maximum numbers of malignant lesions are found by IOUS - totally 21. Preoperative ultrasound found 5 lesions or 23,80% of the maximum number and preoperative CT – 9 or 33,33%. The information from IOUS changed the operative plan in 2/7 of the patients (28,57%). A biliary stent was placed under the control of IOUS in one patient with a heavy hyperbilirubinemia – 791,6 $\mu\text{mol/l}$.

Conclusions: IOUS is significantly helpful in surgery of tumor of Klatskin. Besides the precise localization and staging of the tumor the information of IOUS changes the surgical strategy in some patients.

Key words: preoperative ultrasound, Computer tomography, intraoperative ultrasound, tumor of Klatskin.

RHYTHM DISORDERS DURING COLONOSCOPY

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ABSTRACT:

Purpose: The purpose of this study is to assess the risk of inducing rhythm disorders of the heart during colonoscopy.

Patients and methods used: 80 patients had undergone colonoscopy performed by two experienced specialists of endoscopy for the period from March to December 2011. The endoscopies were performed without premedication and sedation. Holter was placed on each patient one hour before the endoscopic examination, and the record continued one hour after the manipulation. The blood pressure was examined before, during and after the procedure.

Results: During colonoscopy 25 patients / 31,25% / manifested rhythm disorders. In 15 patients / 18,75% / sinus tachycardia occurred. In 7 patients / 8,75% / supraventricular extrasystoles were observed and in

3 patients / 3,75% / - ventricular extrasystoles. No ST-T changes were found. Highest values of the blood pressure were measured before and during the endoscopy, but the values did not exceed 160/105 mmHg. In 10 patients / 12,5% / a hypotensive reaction was observed, but the values were not lower than 80/ 50. In 2 patients there was a short bradycardia with a heart frequency 50-55 /min.

Conclusions: Our results showed that the rhythm disorders during lower colonoscopy occur in approximately 1/3 of the examined patients, there is an increase or decrease of the blood pressure in some patients, but that doesn't require physician's aid and the examination can be carried out safely without monitoring.

Key words: colonoscopy, rhythm disorders.

PERFORATION AS A COMPLICATION OF THE DIAGNOSTIC UPPER AND LOWER ENDOSCOPY OF THE GASTROINTESTINAL TRACT

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Purpose: The purpose of this examination is to evaluate the risk of perforation during endoscopy of upper and lower gastrointestinal tract.

Patients and methods used: 1210 diagnostic gastroduodenoscopies and 412 colonoscopies of hospitalized patients were performed by two experienced endoscopists for the period March 2007 – March 2012 at MHAT Varna, MMA. The endoscopies were performed without premedication and sedation. The patients were observed for complications of the procedure during and after the endoscopy. One of the most serious complications is the perforation of the oesophagus, stomach or the large intestine.

Results: We had no perforations caused by the examination during the 1210 upper endoscopies performed. We had 2 perforations / 0,48% / from the 412 colonoscopies performed, which were treated successfully surgically.

Conclusions: The perforation is a rare but serious complication of the endoscopy of gastrointestinal tract, which can be healed completely.

Key words: gastroduodenoscopy, colonoscopy, perforation.

DEONTOLOGICAL PROBLEMS OF CLINICAL TOXICOLOGY IN BULGARIA DURING THE DECADE 2000-2010

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The specificity of clinical toxicology has always aroused many deontological, medico ethical and legal problems, mainly connected with the ability of the intoxicated patient to perceive and process the received information about his state and necessity of treatment, to agree or refuse medical help, to permit announcing data about his case, etc. During the decade 2000-2010 significant changes in Health law, minor decrees and Medical Ethic Codes have been done, solving partially some of these questions. The new conceptions and conditions aroused new problems, connected with the intoxicated patient's autonomy, right to information, confidentiality, relations of toxicologist with the patient's treating doctor for other diseases, family, employer, insurance agent, lawyer. The necessity of some adaptation of the official formulary of informed consent for urgent clinical disciplines like clinical toxicology is discussed with accent on the dynamics of the process rather than on one-moment decision. For ambulatory cases, a requirement of informed refusal by a whole sentence, free text, hand written by the patient, instead of simple signature is recommended. Clinical toxicology is related to every other clinical discipline, so current analysis and discussions of the deontological questions of this discipline are important.

Key words: deontology, clinical toxicology, consciousness, competent, information, autonomy, duress, access, law

RENAL INVOLVEMENT IN LEPTOSPIROSIS

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Renal involvement is a prominent feature of leptospirosis – a re-emerging infectious disease. It is variable from mild to severe acute renal failure (ARF). **Materials and methods.** We performed a retrospective analysis (1976–2012) of all consecutive leptospirosis cases (n=100, 90 male, age 37±18 years, rural residents 39%, water and animal contacts 57% and 34%, respectively; lethal outcome in 13%), followed by comparative analysis of group with renal involvement (n₁=59) versus control group (n₂=41). **Results.** Clinical manifestations for whole series: fever 100%, hepatomegaly 92%, myalgia 86%, nausea and vomiting 84%, splenomegaly 74%, oliguria 69%, headache 67%, jaundice 63%, hypotension 49%, abdominal pain 41%, hemorrhagic diathesis 37%. These symptoms had significantly higher prevalence in group with renal involvement. Renal dysfunction: 95% of cases with renal involvement had oliguria with low density, 78% – albuminuria, 58% – hematuria. Hypokalemia and hyponatremia were encountered in 20% and 12%, respectively. Blood nitrogen parameters were elevated – blood urea nitrogen mean

27,9±16,9 mmol/L and serum creatinine mean 349,9±190,1 µmol/L. Twelve of cases needed dialysis. **Conclusion.** Leptospirosis presenting with ARF is a severe disease and requires early diagnosis and prompt supportive and etiologic treatment.

Keywords: acute renal failure; hepatic dysfunction; leptospirosis; renal involvement; outcome

CHANGES IN THE IMMUNOLOGIC MARKERS OF ELASTIN DEGRADATION IN SUBJECTS WITH METABOLIC SYNDROME

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Background: It is known that metabolic syndrome characterized by diabetes, hypertension, dyslipidemia, and central obesity is associated with the syndrome of early vessels aging, characterized by a change in elasticity of the vessel wall. The early manifestation of the metabolic syndrome in younger people in the modern society, leads to an earlier manifestation of the complications of early vessels aging. Elastin is one of the main building blocks of the of the vessel wall. It's main characteristic is its elasticity, allowing the vessel to restore its shape after stretching or shrinking. Loss of elasticity is a key component in the pathogenesis of cardiovascular complications.

Materials and methods: A study is conducted on 44 subjects with metabolic syndrome without vascular complications and 42 controls. The main objective of the study was to compare the immunological markers of elastin degradation in both groups and to assess their relationship with the risk factors characterizing the metabolic syndrome.

Results: When comparing the mean value of anti-elastin antibodies IgG (AEAb IgG) in the control group and subject group with metabolic syndrome (respectively 0,45 / - 0.11 and 0.54 / - 0.29) statistically significant higher mean value of AEAb IgG in the group with metabolic syndrome, $t = -1,85$, $p = 0.03$ is observed. When comparing the mean value of anti-tropoelastin antibodies IgG (ATEAb IgG) in the control group and subject group with metabolic syndrome (respectively 0,45 / - 0.13 and 0.55 / - .43) statistically significant higher mean value of ATAb IgG in the group with metabolic syndrome, $F = 6,83$, $p = 0.01$ is observed. There isn't a statistically significant difference in AEAb IGM and AtropoEAb IgM in both groups. In the whole sample AEAb IgG showed positive correlation with total cholesterol with a correlation Spearman coefficient $r = 0,25$, and $p = 0,02$, with triglyceride levels with Pearson correlation coefficient of $r = 0,35$, $p = 0,001$ and with LDL levels with Spearman correlation coefficient $r = 0,29$, and $p = 0,006$. In the whole sample ATEAb IgG showed positive correlation with LDL levels with Spearman correlation coefficient $r = 0,29$, $p = 0,006$ and with levels of total cholesterol with a Pearson correlation coefficient $r = 0,33$, and $p = 0,001$. The Correlations are described by regression analysis and the relationship is linear.

Conclusion: There is prove that the AEAb IgG and AtropoEAb IgG are significantly elevated in the subjects with metabolic syndrome without manifested cardiovascular complications compared with the control group, whereas no difference in AEAb IgM and AtropoEAb IgM has been observed in both groups.

Key words: Metabolic syndrome, AEAb IgG, ATEAb IgG, risk factor

CHANGES IN THE IMMUNOLOGIC MARKERS OF COLLAGEN TYPE IV DEGRADATION IN SUBJECTS WITH METABOLIC SYNDROME

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Background: Collagen is the major protein of the vessel wall. Type IV collagen is found exclusively in base membrane (BM) and doesn't form individual fibers, but instead is an amorphous polygonal matrix which is associated with laminins and other matrix macromolecules and form the unique BM. Under the influence of the risk factors characterizing the metabolic syndrome, specific BM degrading enzymes are activated. The early manifestation of the metabolic syndrome in younger people in the modern society, leads to an earlier manifestation of the complications of early vessels aging. Loss of elasticity is a key component in the pathogenesis of cardiovascular complications.

Materials and methods: A study is conducted on 44 subjects with metabolic syndrome without vascular complications and 42 controls. The main objective of the study was to compare the immunological markers of Collagen type IV degradation in both groups and to assess their relationship with the risk factors characterizing the metabolic syndrome.

Results: When comparing the mean value of anti collagen type IV antibodies IgG (AntiCollIV Ab IgG) in the control group and subject group with metabolic syndrome (respectively 0,28 +/- 0,08 and 0,40 +/- 0,11) statistically significant higher mean value of ACollIV Ab IgG in the group with metabolic syndrome, $F = 30.299$, $p = 0.000$. In the whole sample ACollIVAb IgG showed negative correlation with HDL with a correlation Spearman coefficient $r = 0,26$, and $p = 0,02$. The antibodies showed positive correlation with the diastolic pressure (DP), blood sugar (Gluc), total cholesterol (Tchol), triglycerides (Tg) and LDL. The positive corelations were with Pearson correlation coefficient as follows: DP - $r = 0,22$, $p = 0,04$; Gluc - $r = 0,27$, $p = 0,01$; Tchol - $r = 0,30$, $p = 0.005$; Tg - $r = 0,34$, $p = 0,002$; LDL - $r = 0,32$, $p = 0,002$.

Conclusion: It is proved that the ACollIVAb IgG and are significantly elevated in the subjects with metabolic syndrome without manifested cardiovascular complications compared with the control group and there is a strong correlation between the Ab and the risc factors.

Key words: Metabolic syndrome, ACollIVAb IgG, risk factor

ANALYSIS OF THE SUCCESS OF THIRD-YEAR STUDENTS OF MEDICINE IN MEDICAL UNIVERSITY - VARNA BY TESTED ON THE CARDIOVASCULAR SYSTEM

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The test is objective, fast and convenient way to assess students' knowledge. When used regularly, helps rhythmic learning of school material. Students of third year medical are subjected during exercise test in pathophysiology of cardiovascular system. Follow the test results for the period from 2006 to 2012. Students show a relatively very good value success. Differences in individual years are negligible. Highlighted the advantages of this method of assessment. Recommended wider and penetration rate of test as a means of improving the quality of training of students.

COMPLICATIONS DURING A SUPRACLAVICULAR ANESTHESIA OF THE BRACHIAL PLEXUS WITH INTERSCALENE APPROACH

M. Minkov, M. Vankova, R. Minkov, S. Terzieva, T. Dimitrov

Hemidiaphragmatic paresis is one of the most frequently observed complications following the supraclavicular anesthesia of the brachial plexus with interscalene approach. In patients, dependent on an adequate diaphragm function, the hemidiaphragmatic paresis may provoke acute respiratory disturbances.

Therefore the aim of this study was to research the brachial plexus and its anatomical features regarding the anesthesia of specific areas of the shoulder and the upper limb in accordance with the needs of the surgical intervention.

The established anatomical features during the dissection of the cervical plexus and the brachial plexus were colored with nitrocellulose paint and were documented using a Minolta camera. Our investigation shows that in some cases the phrenic nerve and the accessory phrenic nerve arise as self-dependant branches of the superior trunk of the brachial plexus.

The supraclavicular anesthesia with interscalene approach and the spread of the local anesthetic in the supraclavicular space would significantly increase the percentage of the hemidiaphragmatic paresis in patients with the established type of formation of the phrenic nerve and the accessory phrenic nerve.

THE RECOVERY DETECTION OF DAILY AND LABOUR ACTIVITIES IN THE EVERY DAY LIFE (preparing food and feeding) IN PATIENTS WHO SUFFERED FROM BRAIN VASCULAR DISEASE

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SUMMARY:

Bulgaria is in a leading position concerning morbidity, sick rate and mortality of brain vascular disease (BVD).

The goal of the research was to examine, follow up and detect the recovery and the ability for preparation food and feeding in patients with consequences of BVD.

Sixty one patients were included and follow up in the research. They carried out physio rehabilitation program, taking in the consideration their individual status. This included: kinesitherapy, labourtherapy (occupational therapy and activities of daily life); electrotherapy.

All of the patients were tested in the beginning and at the end of rehabilitation course. They self evaluated the basic parameters not taking in the consideration which of the limbs were particularly affected.

To analyze the results the Wilcoxon rank test is used-a statistical method for analyzing of non parametrical data and distribution. At the end of the rehabilitation course the Wilcoxon's curves are driven to the right, witch confirmed improvement concerning the main parameter (self independence in the main task set to be fulfilled), wither which of the limbs were paretic.

Key words: *rehabilitation, occupational therapy, cerebrovascular disease.*

RECURRENT SHOULDER DISLOCATIONS IN YOUNG PATIENTS: IS THERE A RELIABLE TREATMENT OPTION?

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ABSTRACT

Shoulder dislocations in young active people are serious problem causing restriction of active movement of the upper limb. Most of the patients had some traumatic moment as a begining wich leads at the end to a chronic instability of the shoulder joint. Patients are always with high requirements for the results of treatment .Bristow-Latarjet technique (coracoids transfer) is reliable and simple solution for such patients . Biggest advantages of this technique are atraumatic performance,formig stable shoulder joint and early return to active movement. These are the reasons for recommending this operation as option resolving the problems of chronic shoulder instability.

DEPRESSIVE DISORDERS IN EPILEPSY - ASSOCIATION WITH SOME SOCIODEMOGRAPHIC AND CLINICAL VARIABLES

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Introduction: Depressive disorders are the most frequent psychiatric comorbidity in epilepsy but very often remain unrecognized and untreated.

Purpose of our study is to determine certain sociodemographic and seizure-related correlates of comorbid depressive disorder in people with epilepsy.

Subjects and Methods: The study included 106 adult patients (41 males, 65 females) with a confirmed diagnosis of idiopathic epilepsy. Comorbid depressive disorder was diagnosed according to ICD-10 diagnostic criteria. All patients were evaluated on Hamilton Depression Rating Scale (HAMD-17). Seizure severity was measured by Seizure Severity Questionnaire (SSQ). Sociodemographic data (age, gender, education level, marital status, cohabitation, employment status) and clinical variables (seizure type, seizure frequency, age at seizure onset, duration of epilepsy, seizure severity and antiepileptic medication intake) were recorded. The Pearson product-moment correlation was used to explore correlated factors of comorbid depression.

Results: Comorbid depressive disorder affected 30(28.3%) of the evaluated patients. Age, education and employment status were the sociodemographic factors significantly correlated with HAMD-17 scores in our study, unemployment and disability being most strongly associated with comorbid depression. Older age and low education level also correlated significantly to higher depressive scores. Gender, marital status and cohabitation were not significantly associated with HAMD-17 scores. Seizure severity and seizure frequency, out of the seizure-related variables, significantly correlated to comorbid depression. Greater seizure severity and higher seizure frequency were associated with higher HAMD-17 scores. Seizure type, age at seizure onset, duration of epilepsy and monotherapy/polytherapy did not show significant correlation to HAMD-17 scores.

Conclusions: Greater seizure severity, unemployment or disability, low education level, also frequent seizures and older age were found to be risk factors for patients with epilepsy being in a depressive episode.

Key words: Depression, Epilepsy, Sociodemographic factors, Dual diagnosis

PSYCHOMETRIC VALIDATION OF THE BULGARIAN VERSION OF THE QUALITY OF LIFE IN EPILEPSY INVENTORY (QOLIE-31)

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Abstract

Aim of the study was a psychometric evaluation of a Bulgarian version of the Quality of Life in Epilepsy Inventory (QOLIE-31).

Material and Methods: The translation and cultural adaptation into Bulgarian of the US version of QOLIE-31 were carried out through a procedure of translation-back-translation and cognitive debriefing. A hundred and six adults with epilepsy were interviewed and completed the QOLIE-31. A subset of them was re-examined in a period of 2-3 weeks to evaluate the test-retest reliability of the questionnaire. Internal consistency for the QOLIE-31 overall score and subscales was tested. Convergent validity was assessed by comparison of QOLIE-31 scores and external measures. Discriminative validity was evaluated using the method of known-group comparison.

Results: Cronbach's α was in the range of 0.78 - 0.97 for the different QOLIE-31 subscales, mean score 0.91, proving high internal consistency. Test-retest reliability was very good (intra-class correlation coefficient 0.59 - 0.94 and Pearson's coefficient 0.64 - 0.94). Comparison of QOLIE-31 subscale scores and external measures (social functioning with satisfaction from social life; medication effects with side-effects presence and emotional well-being with diagnosed depressive disorder) showed good convergent validity. There was a statistically significant negative association between QOLIE-31 overall score and seizure frequency ($r=-0.52$; $p<0.01$) and different employment status ($r=-0.47$; $p<0.01$) showing the discriminative validity of the questionnaire.

Conclusion: The Bulgarian version of the QOLIE-31 has psychometric properties equivalent to those of the original American version and the validated Spanish, French and Greek versions and is a valid and reliable instrument.

Key words: Psychometric properties, QOLIE-31, Epilepsy, Quality of life

THE VALIDITY OF THE HAMILTON DEPRESSION RATING SCALE AS A SCREENING AND DIAGNOSTIC INSTRUMENT FOR DEPRESSION IN PATIENTS WITH EPILEPSY

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Abstract

Aim: To evaluate the validity of the Hamilton Depression Rating Scale (HAM-D-17) as a screening and diagnostic scale for depression in patients with epilepsy.

Subjects and Methods: One hundred and six patients with a confirmed diagnosis of idiopathic epilepsy, without any other somatic or neurological comorbidity were included in the study. All patients underwent clinical psychiatric examination including evaluation on HAM-D-17. Comorbid depressive disorder was diagnosed according to ICD-10 criteria. Internal consistency was assessed using Cronbach's α . A "receiver operating characteristics" (ROC) curve was obtained and the sensitivity, specificity, positive and negative predictive values (PPV, NPV) were calculated for different cut-off points of the HAM-D-17, illustrating the discriminative properties of the scale.

Results: Cronbach's α was 0.74, proving high internal consistency. Maximum discrimination between depressed and non depressed was obtained at a cut-off score of 8/9 (sensitivity 0.93, specificity 0.98). High sensitivity and NPV were obtained at the same cut-off score (sensitivity 0.93, NPV 1.0), which makes the instrument useful for screening purposes. At higher cut-offs - 9/10, the high specificity and PPV make this instrument a good diagnostic tool. The area under the ROC curve (74.60 %) indicates that the HAM-D-17 score has high concurrent validity with the ICD 10 criteria for depressive disorder.

Conclusion: Our results show that the clinical practice to use the HAM-D-17 to measure depressive symptoms in patients with epilepsy is justified. The concurrent validity of the HAM-D-17 against ICD 10 criteria for depressive disorder in patients with epilepsy is high.

Key words: Psychometric properties, HAM-D-17, Epilepsy

DIABETIC MASTOPATHY- CLINICAL AND MORPHOLOGICAL FINDINGS

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The presence of fibrosis, tumor and stromal proliferation was first described in 1984 in patients with diabetes and subsequently accepted as a separate form of mastopathy.

The aim of this study was to analyze the clinic and histopathological findings in patients with diabetic mastopathy.

In the Department of Thoracic Surgery at the Military Medical Academy in Sofia, for 3 years were observed 17 patients with manifestation of the disease. The control group included 20 patients with fibrocystic mastopathy in the same age group (65-30 years).

Histological preparations were tested for the presence of extensive keloid fibrosis, vasculitis, mononuclear lobulitis and ductitis. At least one of these signs was manifested in all of the patients with diabetes mellitus.

The literature data and the results obtained confirm that these constellations of histological signs are relatively specific for diabetic mastopathy, which allows us to assume this pathology as a separate form of fibrocystic breast disease.

FATTY ACIDS AND FAT SOLUBLE VITAMINS IN WILD FISH SPECIES FROM DANUBE RIVER

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Objectives: Many studies suggest that fish is one of the most important dietary sources of vitamin A (all-trans-retinol), vitamin D₃ (cholecalciferol) and vitamin E (alpha-tocopherol) and also essential fatty acids (FA), but their contents depend on the fish species. Human health is additionally affected by saturated, monoenoic and polyenoic fatty acids, other than omega 3 PUFA. Lipid quality indicators that depend on the relative contents of particular groups of fatty acids are the atherogenic index (AI) and thrombogenicity index (TI), which indicate the global dietetic quality of lipids and their potential effect on the development of coronary diseases.

There is limited information in the scientific literature about the nutritive composition, especially vitamin contents and health lipid indexes of Bulgarian freshwater species. This study is focused on two of most commonly consumed freshwater fish species in Bulgaria - wild Catfish (*Silurus glanis*) and Common carp (*Cyprinus carpio*). The aims of the present work are to determine and compare retinol, cholecalciferol, alpha-tocopherol and fatty acids contents as well as atherogenic index (AI) and thrombogenicity index (TI) for this species.

Methods: The fatty acid (FA) composition was analyzed by GC-MS. Lipid extraction was done according to the Bligh and Dyer method. Methyl esters were prepared according to method EN ISO 5508:2000. Vitamins A, D₃ and E were analyzed simultaneously using RP-HPLC system. The sample preparation procedure includes saponification and liquid-liquid extraction of the unsaponifiable matter.

Results: The total lipid content in catfish was 4.15 g /100 g raw weight (r.w.), in common carp – 12.10 g /100 g r.w. The sum of saturated fatty acid (SFA) of catfish and carp ranged 28.34% and 40.10% of total fatty acids (FA). The sum of monounsaturated FA (MUFA) accounted for catfish was 50.02 % and 23.15 % for carp respectively. In comparison with other groups, the polyunsaturated FA (PUFA) showed the higher level in carp – 36.75 % whereas in catfish they showed lowest levels - 21.64%. The level of total ω -3 PUFAs was higher than the total ω -6 polyunsaturated fatty acid in carp (17.21%), while catfish shown a similar levels of two omega- PUFAs. A ω -3/ ω -6, PUFA/SFA ratios, AI and TI were determined in all fish

samples. The fat soluble vitamins content in fresh edible fish tissue of analyzed species are in ranges for catfish: all-trans-retinol - $1470.6 \pm 37.60 \mu\text{g}/100\text{g}$; cholecalciferol - $3.05 \pm 0.46 \mu\text{g}/100\text{g}$ and α -tocopherol - $1.87 \pm 0.14 \mu\text{g}/100\text{g}$ and common carp: all-trans-retinol - $1713.0 \pm 37.10 \mu\text{g}/100\text{g}$; cholecalciferol - $14.75 \pm 1.50 \mu\text{g}/100\text{g}$ and α -tocopherol - $30.77 \pm 3.40 \mu\text{g}/100\text{g}$.

Conclusion: Catfish and carp are good dietary sources of n3 and n6 PUFAs. However, carp is a better source of fat soluble vitamins. In addition one survey of its fillet provides almost three times higher vitamin D than established RDI in our country. The investigated fish species in this study might be used as a part of different dietary treatment and can be include in preventive healthy diets.

DIABETES MELLITUS IN PARKINSON'S DISEASE PATIENTS

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Parkinson's disease (PD) is the second most common neurodegenerative disease, affecting approximately 5 million people worldwide.

Some studies have found an association between PD and type 2 diabetes mellitus (DM). Their results suggest a common pathophysiologic pathway. Other authors fail to establish any link between the two diseases.

We investigated the medical records of 85 patients (45 males and 40 females), aged $68,02 \pm 9,02$ (40-87) years, with disease duration $4,98 \pm 3,96$ (1- 18) years, diagnosed as PD, according to the United Kingdom Parkinson's Disease Society Brain Bank Diagnostic Criteria, hospitalized in our clinic for 2 years period. Our results showed 18,8% prevalence of DM in PD patients.

We discuss the potential relationships between these two disorders having great medical, social and economic impact. Insulin levels contribute to normal brain function. The history of DM or the use of antidiabetic drugs might be a risk factor for PD.

Key words: Parkinson's disease, Type 2 diabetes mellitus, Association, Risk factor

SURGICAL MANAGEMENT OF LIVER COMPLICATE HYDATIDOSIS: A MULTICENTRE SERIES OF 242 PATIENTS

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Abstract

The purpose of this study was to compare the efficacy and safety of radical and conservative surgical interventions for liver hydatid disease.

Materials and methods: This is a retrospective, multi-centre review of surgical experience in the management of hepatic hydatid disease in children. Patients enrolled in this study were cared for by different surgeons with different views on the medical and surgical treatment of hepatic hydatid disease. We reviewed the records of 242 children admitted consecutively to the University Hospital in Stara Zagora and University Hospital- Plovdiv between 1990 and 2012 for hydatid disease of the liver.

Results: During a median follow-up of 5 years, there was a significant decrease in the first part of this study in the late reoperation rate (8.4-3 %) and in disease recurrence (9-1.6%).. The results strongly suggest that in the management of uncomplicated hydatid cysts of the liver, the surgical techniques which do not employ drainage of the cystic cavity are superior to those which use drainage. Twenty of the patients (8.26%) had multiple echinococcal cysts and received surgical procedures of both types/Group 1 and Group 3/. That's why the results of those patients did not correspond to the aim of the study and they were not included in it. Group 1 and group 2 patients had similar complication rates (62% and 54%, respectively) and mean hospital stay (24 and 23 days, respectively). Because pericystectomy and hepatic resection resulted in a low rate of recurrence and eliminated the need for use of potentially toxic scolicedal agents, these procedures may be the preferred method for the surgical management of hepatic hydatid disease.

Conclusions: This large national observational multicentre series shows a significant improvement in surgical management of HLD in Bulgaria, with a decrease in mortality, morbidity, early and late reoperation and recurrence rates. Age, size of the cyst, the presence of pre-operative complications particularly cyst-biliary communication, and type of surgical procedure performed (conservative or radical) represent as significant predictors of mortality and morbidity of surgery for liver hydatid cyst. Although conservative surgical procedures are considered simpler and safer to perform in childhood, the rate of postoperative complications such as biliary fistula, residual cavity and recurrence, and cavity suppuration has been reported to be about 35%. On the other hand, radical surgery can be performed with low risk of recurrence and shorter hospital stay. We believe radical surgical procedures present a lower rate of recurrence and less morbidity, and thus should be the surgical treatment of choice for hepatic hydatid disease. not be systematically used in all patients, and its indication must depend on patient characteristics, cyst anatomy, and surgical team experience.

Key words: liver hydatid disease, complications, surgery

TECHNIQUE OF THREE DIMENSIONAL RECONSTRUCTION IN DEGENERATIVE LUMBAR SPINE

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The basic problems in the lumbar spine biomechanic in advanced degenerative changes ,structural festures and requirements stabilizing systems are examined. The standart dorsal, anterior and miniinvasive approaches to L2-L4 (retroperitoneal) and transperitoneal to L5-S1 disk with autor's tools for them are presented. Biomechanical parameters and surgical gestures in different types of vertebral reconstructions in 3 D intraoperatively to move to the normal anatomic position in the area werw analized. The results of 173 clinical cases are presented.

THE EFFECT OF DECOMPENSATED HEART FAILURE TREATMENT ON N-TERMINAL PROBNP LEVELS IN HOSPITALIZED PATIENTS AGED OVER 60

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BACKGROUND: Despite recent therapeutic advances in management of heart failure (HF), HF remains one of leading causes of morbidity and mortality. Currently management of HF remains challenging and clinicians are clearly still in need of improved monitoring tools. It is necessary to find and refine such tools. N-terminal proBnP have emerged as important tools for the diagnosis and risk stratification of patients with HF, but have not been clearly shown to supplement careful clinical assessment for managing HF. Unanswered questions remain regarding optimization of N-terminal proBnP use. One of the biggest hopes for utilizing N-terminal proBnP testing is to determine the level of disease severity in a manner to triage medical decisions as well as to monitor their responses. A single determination of BNP at any time during the progression of chronic HF provides a clinically useful tool for risk stratification. The hypothesis that repeated measurements might carry prognostic information beyond a single measure helps elucidate its role in guiding HF management.

AIM: To determine whether N-terminal proBnP levels change during HF treatment.

Materials and methods: In a prospective trial 67 patients over 60 years(mean age 73.4±7.2 years) hospitalized because of decompensated HF were studied. The levels of hsCRP and NT-proBNP were tested in all patients in the first two days of admission and 11 patients of them were retested for hsCRP and NT-proBNP before hospital discharge after standard HF treatment. Clinical variables, echocardiographic indices, duration of hospitalization, and in-hospital survival status were assessed. In the processing of the data were used parametric, correlation and regression analysis. P values <0.05 were regarded as statistically significant.

RESULTS: Left ventricle ejection fraction(LVEF) before hospital discharge was not significantly higher in comparison with EF in admission, while NT-proBNP levels before hospital discharge(after standard HF treatment) show significantly higher levels than NT-proBNP levels tested in first two days after admission (P <0.05). Negative and significant correlation between N-terminal proBnP levels and LVEF was established, but the correlation coefficient between NT-proBNP levels tested before hospital discharge and LVEF was higher (r = -0.928, p= 0.0025). Correlation between N-terminal proBnP levels and length of hospitalization were positive and significant (r = 0.6713816, p = 0.0476887), whereas only hsCRP tested before hospital discharge show significant relationship with length of hospitalization (r = 0.81993, p = 0.023923). NT-proBNP level significantly correlated with CHF symptom severity among patients over 60 years hospitalized with decompensated HF.

CONCLUSION: This pilot work has provided encouraging results suggesting that repeated testing of N-terminal proBnP levels in patients over 60 years hospitalized with decompensated HF may be an effective strategy to optimize HF management. Further prospective trials are needed to confirm these preliminary findings and definitively establish that serial testing of N-terminal proBnP levels is useful in HF management in patients over 60 years hospitalized with decompensated HF.

LOW-LEVEL INFLAMMATION AND LEVEL OF PLASMA NT-PROBNP IN PATIENTS OVER 60 YEARS WITH HEART FAILURE

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BACKGROUND: Heart failure(HF) is a significant problem of current health care associated with significant financial pressures on health care systems. The incidence and prevalence of heart failure (HF) are significantly higher and increase with age. The hospitalizations and rehospitalizations for HF in this age group rise substantially. The prognosis of HF remains unfavorable despite the successes in treatment and in the recent years. Limited data exist regarding the relationship of low-level inflammation and level of plasma NT-proBNP and prognosis in elderly patients with decompensated HF.

Objective: By testing the level of hsCRP (high sensitivity CRP) and plasma NT-proBNP to examine the relationship of low-level systemic inflammation and the level of plasma NT-proBNP with echocardiographic parameters and prognosis in patients over 60 years with decompensated HF.

Material and methods: The levels of hsCRP and NT-proBNP were investigated in 67 HF patients aged over 60, hospitalized for decompensated HF (II-IV functional class according NYHA). Clinical examination and echocardiographic examination (dimensions of cardiac structures, left ventricle ejection fractions-LVEFs, Doppler assessment of blood flow, pulmonary artery wedge pressure) were carried out in all patients included in the study. In all patients hsCRP and NT-proBNP were also tested in first two days after admission. In the statistical processing of the data, parametric, correlation and regression analysis, COX regression analysis were used. P values <0.05 were regarded as statistically significant.

Results: The severity of clinical signs of HF and LVEFs showed significant association with the levels of NT-proBNP. Significant and positive correlation was established between the functional class (FC) of HF according NYHA and levels of NT-proBNP. With the increase of FC of HF, the levels of NT-proBNP increased. Lower concentrations of NT-proBNP were identified in patients with HF on optimal therapy and optimal control of symptoms. Significant and negative correlation was established between the level of NT-proBNP and LVEFs. Significant and positive correlation was found between the level of NT-proBNP and duration of hospitalization and mortality, while a similar correlation between levels of hsCRP was established only with the duration of hospitalization. Extremely high levels of NT-proBNP indicate unfavorable short-term prognosis in studied patients over 60 years of age with decompensated HF. The level of NT-proBNP proved to be a significant independent factor for mortality after COX regression analysis performance.

Conclusion: The level of NT-proBNP reflects the degree of left ventricular dysfunction and is an important indicator of mortality. The level of hsCRP, with the level of plasma NT-proBNP and indices of left ventricular function could allow precise prognostic assessment, stratification and selection of treatment strategy for HF. The study results suggest that the level of NT-proBNP is suitable clinical indicator because of its high prognostic significance in patients over 60 years of age with decompensated HF.

STRUCTURE OF THE TESTS OF OUTPATIENT RHEUMATOLOGY IN BULGARIA FOR THE PERIOD 2006-2011 YEAR

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Summary

The term "musculoskeletal disorders" includes all diseases affecting bones, joints, periarticular structures and muscles; all types of arthritis, systemic connective tissue disorders, back pain, bone disorders like osteoporosis, soft tissue rheumatism, and any rheumatic pain. There are several possible causes for them such as mechanical problems, injuries, age-related changes or inflammatory processes. Some of these disorders are sporadic, but many of them are common or chronic, and some can be life threatening. They are also the most common causes of disability. Although many of these diseases are limited to the musculoskeletal system, a lot of them also affect other organ systems and their management is complex. The structure of rheumatic diseases in primary care and in hospital practice gives important information on the incidence of the various rheumatic disorders. It is also important for better planning of resources - personnel, facilities and finances, as well as for adequate professional interrelations to benefit patients. Many studies have been performed aimed at defining the correlation between the different variables affecting the prevalence of rheumatic diseases, such as age, gender, ethnos, economic status of the individual, etc. We present in this paper the structure of the test of outpatient rheumatology in Bulgaria for the period 2006-2011 and some important correlations between the main factors

SUBJECTIVE COGNITIVE COMPLAINTS IN A PATIENT WITH KERATOCONUS: COGNITIVE IMPAIRMENT OR "KERATOCONIC PERSONALITY"?

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Abstract

Keratoconus is a disorder affecting the cornea, characterized by its variably progressive central thinning, which results in conically shaped protrusion. Patients with keratoconus are sometimes described as having peculiar personality characteristics. We present the case of a patient with keratoconus, complaining of impairment of concentration and memory disturbances. He reported slow progression of the complaints but was fully capable of performing his professional and social activities. Neuropsychological assessment confirmed fluctuations of active attention and diminished concentration. Long term memory was within normal limits, but closer to the lower level. MMSE score was 27. No significant changes were observed one year after baseline assessment. No major psychiatric disorder was found. In this clinical case we are tempted to discuss the possible role of keratoconus, which, as it has been described in the literature, could lead to some slight changes of behavior, forming a "keratoconic personality".

Key words: cognitive impairment, keratoconus, keratoconic personality

CAT SCRATCH DISEASE Case Report and Literature Review

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Abstract

Approximately 24,000 people are infected with cat scratch disease (CSD) every year. CSD is caused by the bacteria *Bartonella henselae*, a gram-negative bacteria most often transmitted to humans through a bite or scratch from an infected cat or kitten. Although CSD is often a benign and self-limiting condition, it can affect any major organ system in the body, manifesting in different ways and sometimes leading to lifelong sequelae. It is a disease that is often overlooked in primary care because of the wide range of symptom presentation and relative rarity of serious complications. It is important for health care providers to recognize patients at risk for CSD, know what laboratory testing and treatments are available, and be aware of complications that may arise from this disease in the future.

Keywords: *Bartonella henselae*, cat scratch disease, cat scratch fever

BOTULIN TOXIN A APPLICATION IN CEREBRAL PALSY

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ABSTRACT

Cerebral palsy is defined as a disorder of movement and posture caused by a nonprogressive defect or lesion in an immature brain. Children with cerebral palsy make up the largest group of pediatric patients with neuromuscular disorders. The occurrence of cerebral palsy is 0.6 to 5.9 patients per 1000 live births.

Cerebral palsy can be divided into six physiological types: spastic, athetoid, ataxic, hypotonic, rigid, and mixed. Spastic cerebral palsy is the most common type, occurring in about 70% to 80% of patients with cerebral palsy. Athetoid cerebral palsy is the next most common type, accounting for about 10% to 15% of cases. The lesions in the brain that cause abnormality in movement or posture occur primarily in the following four areas: the cerebral cortex (spasticity), the midbrain or base of the brain (athetosis), the cerebellum (ataxia), and widespread brain involvement (mixed).

Injections of various substances into muscles and around nerves may be used to weaken a muscle and improve the balance of forces across a joint to assess whether this will improve function. This usually is only temporary but may be of value to allow a stretching and strengthening physical therapy program.

Botulinum toxin was introduced as a treatment for spasticity in children with cerebral palsy. Botulinum toxin is a neurotoxin produced by Clostridia bacteria. This protein polypeptide chain irreversibly binds to the cholinergic terminal in the neuromuscular junction and inhibits the release of acetylcholine that is necessary for muscle contraction. It affects contractures, which are due to dynamic (muscle) spasticity, but not joint contractures. Treatment of muscle spasticity in cerebral palsy by derivatives of Botulinum toxin A is widely discussed and a new method in clinical environments. The object of discussion is not the benefit of treatment and dose of medication. Ultrasound assisted application makes it possible to treat a specific muscle, the dose to be minimal and successful implementation of physiotherapy, with prolonged effect.

The use of botulinum toxin significantly reduced the incidence of operative intervention, which is a fundamental principle in the treatment of cerebral palsy.

Key words: cerebral palsy; spastic cerebral palsy; athetoid cerebral palsy; botulin toxin A

ULTRASOUND GRAF'S METHOD FOR BABY'S HIP EXAMINATION - A CONTEMPORARY APPROACH FOR EARLY HIP DYSPLASIA DIAGNOSIS

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ABSTRACT

Congenital dysplasia of the hip generally includes subluxation of the congenital anomalies femoral head, acetabular dysplasia, and complete dislocation of the femoral head from the true acetabulum.

The incidence of congenital dysplasia of the hip has been 1 in 1000 live births, but orthopaedic screening - 11.5 per 1000 and for ultrasound examination - 25 per 1000.

Several theories regarding the cause of congenital dysplasia of the hip have been proposed, including mechanical factors, hormone-induced joint laxity, primary acetabular dysplasia, and genetic inheritance. Breech delivery, with the mechanical forces of abnormal flexion of the hips, can be seen as a cause of dislocation of the femoral head.

The typical clinical screening should include the Ortolani and Barlow test. Many reports evaluated the use of ultrasound screening of newborns for early diagnosis of congenital dysplasia of the hip. The most comprehensive accounts of the anatomy of the infant hip by ultrasound are by Graf of Austria, who devised an ultrasonographic classification for hip dysplasia. By Graf method can be made early diagnosis of congenital hip dysplasia. This allows to start early and effective treatment. There is about 95-96% success of the method and surgical treatment is limited to 3%. In our clinic to perform 2-3 operations per year, whereas previously were made twice as many operations per month.

We present ultrasound Graf's method for baby's hip examination.

Keywords: hip dysplasia; ultrasound examination; Graf's method

ABDUCENS NERVE PALSY AND THROMBOSIS OF THE CEREBRAL VEINS AND SINUSES – A DIAGNOSTIC PITFALL

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Introduction: Thrombosis of the cerebral veins and sinuses is an infrequent cerebrovascular disorder. Because the highly variable symptoms, recent neuroimaging plays a key role in the diagnosis. Abducens nerve palsy as a focal neurological deficit is a rare clinical manifestation in these patients. We present two cases with sudden onset of diplopia and headache.

Material and methods: Cases report

Case 1: A 3-year old girl with B cell lymphoblastic leukemia developed bilateral abducens deficit and bilateral optic disc edema after treatment including L-asparaginase. Thrombosis of the right jugular vein, sagittal and right sigmoid sinuses was visualized on magnetic resonance imaging (MRI) and magnetic resonance venography (MRV). Symptoms gradually resolved after treatment with enoxiparine and MRV demonstrated recanalization.

Case 2: A 75-year old female with medical history of arterial hypertension presented with headache and sudden left abduction deficit. Computerized tomography (CT) scan was normal. MRI and MRV revealed aging brain and disruption of venous flow at the left internal jugular vein, suspecting thrombosis. Extracranial colour duplex sonography and CT angiography proved haemodynamic equivalent of left internal jugular vein thrombosis due to sclerotic pathology of aortic arch.

Discussion and conclusion: Our first case illustrates the role of improved neuroimaging techniques as the best method for diagnosis of cerebral veins and sinuses thrombosis, presenting with abducens nerve palsy. With second case the potential neuroimaging pitfalls concerning the accurate diagnosis of these cerebrovascular disorders with neuro-ophthalmologic manifestation are discussed.

Key words: abducens nerve palsy, cerebral veins and sinuses thrombosis, diagnostic pitfall

USEFULNESS OF MRI IN PATIENTS WITH REFRACTORY EPILEPSY

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ABSTRACT

Introduction: Refractory epilepsy is common in patients with structural brain lesions. They include acquired disorders (stroke, trauma, tumor, infection) and genetic abnormalities (tuberous sclerosis, malformations of cortical development, hippocampal sclerosis). Recently, MRI is a precise diagnostic tool for recognition of different structural causes underlying medically intractable seizures.

Objective: To study the usefulness of MRI for detection of clinically suspected etiological causes in patients with refractory epilepsy.

Material and methods: 49 patients (20 M and 29 F; aged 48.6±24.7 years) with refractory epilepsy were included in the study. They presented with partial (46%), secondary (31%) or primary (23%) generalized tonic-clonic seizures. Diagnosis was based on the criteria of ILAE. Structural neuroimaging (MRI), EEG, and clinical follow-up were performed

Results: MRI detected different structural brain lesions totally in 36 (73.5%) patients, including cerebral tumors (23 p), cerebrovascular accidents (3 p), developmental malformations (3 p), hippocampal sclerosis (3 p), postencephalitic cysts (2 p), and posttraumatic sequel (2 p). 13 (27.5%) cases had normal neuroimaging findings. EEG showed focal epileptic activity in 38 (77.6%) patients, including 33 cases with and 5 without structural brain abnormalities.

Conclusion: This study confirmed that structural brain lesions are commonly associated with refractory epilepsy. Based on our own results and literature review, we suggested that MRI is a useful diagnostic method for assessment of patients with uncontrolled seizures or altered epileptic pattern.

Key words: MRI, structural brain lesions, refractory epilepsy

SIMULTANEOUS DISC HERNIATIONS IN PATIENTS WITH MULTIPLE SCLEROSIS

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ABSTRACT

Introduction: Multiple sclerosis (MS) is a chronic autoimmune, inflammatory demyelinating disease of the CNS. It is one of the most often cause of neurological disability affecting young adults. Patients with MS are commonly associated with degenerative disc diseases. Simultaneous disc herniations situated in the cervical or lumbar spine can mimic the MS clinical symptoms and worsen patients' quality of life.

Objective: To study the incidence and clinical impact of simultaneous disc herniations in patients with MS.

Material and methods: 330 patients (220 females and 110 males, mean age 40.5±16.4 years) with clinically definite MS according to McDonald's criteria were included in the study. All patients were admitted to the First Neurological Clinic of UMHAT St. Marina during the period from Jan. 2005 to Mar. 2012 year. Neurological examination, EDSS assessment, anatomical neuroimaging (MRI and/or CT), and data statistical analysis were performed.

Results: 280 patients had RRMS and 50 SPMS. EDSS scores ranged from 2.5 to 5.5. Disc herniation was found in 64 (19.4 %) of MS patients (38 females and 26 males). Cervical disc pathology was detected in 38 (11.5 %) patients, while 26 (7.93 %) cases had disc herniation in lumbosacral region. EDSS evaluation showed worse scores in MS patients with disc herniation comorbidity.

Conclusion: Our own data confirmed that patients with MS have associated degenerative disc pathology. We suggested that comorbidity of disc herniation and MS has an additional impact on patients' disability and quality of life.

Key words: Multiple sclerosis, disc herniation, comorbidity

HEPATITIS E VIRUS – HAVE YOU MET IN BULGARIA?

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Background: Hepatitis E virus (HEV) is a major cause of acute hepatitis in Southeastern Asia, whereas it is not considered a major health problem in Europe.

Aims: To investigate the possible role of HEV in causing acute hepatitis in Northeastern Bulgaria.

Study population: 38 patients observed from December 2011 to April 2012 were studied by single serum samples. One of these patients had travelled to areas at high HEV endemicity. There are no data for the others.

Method: Commercial ELISA test kits (DSI anti HEV IgM, DSI S.r.l. Saronno, Italy) was performed.

Results: Six of 38 (15.8 %) cases were associated with HEV infection as shown by positive IgM anti-HEV test.

Conclusion: Sporadic HEV infection is present in Northeastern Bulgaria where it may cause acute hepatitis.

Keywords: Acute hepatitis; Epidemiology; Hepatitis E; Serological diagnosis

PSYCHOSOMATIC “ARC” IN THE PSYCHOTHERAPEUTIC PRACTICE

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Abstract

The psychoneuroimmunology, the new brain science and the endocrinology today (M.M. Lorentz, 2006) show a lot of results, with which symptoms are better to understand. The psychotherapeutic practice shows the ways to influence them by encoding the levels of bounding between the physical symptom and the psychological condition.

The aim of the study was to show the encoding of the psychosomatic arc within a real psychotherapeutic contact.

Material and Methods:

59 psychotherapeutic cases are followed. 33 of them were with somatoform disorders and 26 with chronic psychosomatic diseases. Every patient has minimum 12 psychotherapeutic sessions. The treatment is provided on the base of the 5 levels model of the positive psychotherapy. The “balance model” of N. Peseschkian (1997) was used to illustrate the received results.

Results: We ascertain the following:

1. The most significant moment in the arise of such symptomatic is the gained past experience – “vital concepts”; “copping strategies”;
2. Unlocking moment for the arise of the affection is the fixed emotion – fear, aggression or depression, specific for the particular morbid pictures;
3. Showing the connection between symptom and fixed emotion by the technique “positive reinterpretation”, which unlocks the process of changing

Conclusion: The psychotherapeutic help is possible only if the patient rethink the psychosomatic arc. Showing the connections between the content of the unconscious, the fixed emotion in behavioral models and the symptom gives the impetus to change.

Key words: Psychosomatic arc; connection between unconscious – fixed emotion – symptom; positive psychotherapy.

EXPERIENCE VITALLY IMPORTANT EVENTS BY PEOPLE WITH DIAGNOSED PREHYPERTENSION

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Abstract

The concept "prehypertension" is included as a new risk category with the seventh report of the Joint National committee on High Blood Pressure in 2003. The condition is characterized with blood pressure 120-139/80-89 mm Hg. Studying this condition makes it possible to search for parameters that can change the way of life of those who suffer before they reach the hypertonic problematic (A. J. Viera et.al; 2010).

The aim of the study was to find the degree, frequency and contents of experiencing vitally important events by people with prehypertension.

Material and Methods: 99 men and women were examined. 60 of them were with pre-hypertension and 39 with normal rates of the blood pressure. They were separated in two age groups – 19-24 and 30-44. The Social Readjustment scale of Holmes and Rahe (1967) was used to mark the importance of their experience.

Results: The patients with pre-hypertension survive twice the emotional charge the vitally important events passed during the last 1-5 years than people with normal blood pressure. In the two different clinical groups there are all kinds of self changes experienced stressfully – a new level of activities, home, financial position, contacts (63,63%). There is also an emotional fixation on the optimal body functioning (sleep, food, weight). In the age group between 19 and 29 years stressful is even one emotionally positive event (100%).

Conclusion: Patients with pre-hypertension experience more stressfully the vitally important events which are a result of their own qualities and coping strategies. The healthy individuals experience more moderately these kinds of events. The number of the events depending on their own personal peculiarities is notably less than those to people with pre-hypertension ($p \leq 0.001$).

Key words: Pre-hypertension, vitally important events, experience, stress

SOCIAL COMPETENCE IN 18-YEARS-OLD STUDENTS WHO HAD PERFORMED AN AGGRESSIVE ACT AT SCHOOL

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Abstract:

The social competence as a general concept consists of social, emotional, cognitive and behavioral skills. It is regarded as a basic quality of effectiveness at social interactions associated with successful behavioral patterns.

Social competence is related with variation in the ability to react in different situation, learn from past experiences, and apply the past experience to the changes in social interactions.

The present writing is aimed to define the relation between the level of forming a social competence and aggressive behavior at school of 18-years-old students.

The relation social competence and aggressive behavior is analyzed by the Giessen Test (GT). The methodology is suitable for studying crucial social qualities and reacts.

The subjects of the research were two groups of students – a group of students with aggressive behavior and a referential group.

The results show a tendency of increased self-esteem, own social popularity and attractiveness all of them combined with insufficient self-understanding and insufficient self-control in the students with aggressive behavior

The data lead to conclusion that the analyzed students who had performed aggressive acts at school do not have considerable deviations of the average values according to the scales of the GT. Their behavior is a result of not well formed aggressive impulse and lacks of mature self-assessment.

Key words: social competence, aggressive behavior, Giessen Test, social interaction