Zl. Kolarov. OSTEOPOROSIS IN MEN

Summary. Except for women, osteoporosis (OP) is a serious health problem for men as well. In USA, 1-2 million men suffer from OP. Over 20% of the symptomatic vertebral fractures and 30% of the femoral neck fractures are found in men. The number of men with OP fractures demanding hospital treatment is similar to that of patients with prostatic carcinoma, though treatment of fractures is associated with considerably longer hospital stay. In 50-60% of the men, OP is due to a preceding disease. Although the specific clinical manifestations, predisposing factors, diagnostic and treatment methods in OP in men coincide with those in women, they exhibit in the same time several specific differences. The peak bone mass in men is determined by genetic factors, age, puberty onset, physical activity, calcium intake in childhood, and the bone loss – by hypogonadism, decreased physical activity, smoking, alcohol consumption, vit. D deficit. Leading method in the diagnosis of OP in men is the measurement of bone mineral density and a value of T-score < −2.5 based on the indices of a reference group of healthy men of a given population. The treatment of OP in men includes use of testosterone in proven hypogonadism and biphosphonates in idiopathic or corticosteroid-induced OP. There are used also teriparatide and calcitonin. Calcium and vit. D are recommended in elderly men and as adjuvant agents to the basic treatment. The intermittent use of biphosphonates and strontium ranelate for treatment of OP in men needs further clinical studies.

Key words: osteoporosis, pathogenesis, diagnosis, fractures, treatment, men

A. Toncheva, K. Ikonomova and I. Gruev. RHEUMATOID ARTHRITIS AND CARDIOVASCULAR RISK

Summary. A number of studies present evidence that atherosclerosis and the autoimmune rheumatic diseases have similarities in their pathogenesis. Key moments are endothelial dysfunction, chronic inflammation and immune disregulation. The measurement of the thickness of the intima media of a. carotis communis is one of the early indications for predisposition of the rheumatic patients to the development of cardiovascular diseases. We must increase our attention towards cardiovascular risk in the rheumatically ill.

Key words: atherosclerosis, autoimmune jount diseases, endothelial dysfunction

ORIGINAL ARTICLES

K. Yablanski, Zl. Kolarov, S. Vladeva and V. Yordanova. SURVIVAL AND MORTALITY IN SYSTEMIC SCLEROSIS PATIENTS

Summary. The aim of the investigation is to determine the survival rate of patients with proven systemic progressive sclerosis, as well as to define the causes for mortality, and to look for the connection between the type of the illness progress and the survival. There have been investigated 69 patients – 63 women and 6 men for a 15-year period. There is a dependence of the survival on the disease activity. All patients with rapid evolution end lethally (100 % mortality) within 5 years since the beginning of the illness. In the moderate evolution cases, the survivors are 77.8%, whereas the slow evolution cases reach up to 90.0% for the period of investigation. Out of the total investigated population for 5 years since the disease onset, they have survived 66 patients (95.6%), for the next 5 years they are 62 (89.8%), 60 patients (86.9%) have survived 15 years, 58 (84.1%) are those surviving more than 15 years, and the ones over 20 years are 55 (79.7%). The causes for the mortality in the first five years are vasculitis, acute nephropathy and primary pulmonary hypertension. In the next five years, the causes for mortality are primary and secondary pulmonary hypertension.

Key words: systemic sclerosis, scleroderma, prognosis, survival

R. Karalilova, A. Batalov, R. Nestorova and D. Penev. EARLY DIAGNOSTICS OF SPONDYLOARTHROPATHIES AND ULTRASOUND EVALUATION OF ENTHESOPATHIES

Summary: The enthesisis is magnificent diagnostic standard in proving Spondyloarthropathy (SpA). It is not clinically proved in each case. The aim of our study was to assess Ultrasonography (US) in establishing early seronegative SpA. By using accepted by EULAR MASEI-index for US evaluation of
insertions, we established that it is available in 79.41% in patients with seronegative SpA. That is more significant than healthy control group.

**Key words:** spondyloarthropathies, enthesopathies, diagnostics, ultrasound

K. Nikolov, R. Rashkov and M. Baleva. **THE COMPOSITION OF CIRCULATING IMMUNE COMPLEXES IN THE SERA OF LUPUS PATIENTS**

**Summary.** We determined the mean concentration of circulating immune complexes (CIC) in the sera of patients with systemic lupus erythematosus (SLE) and in healthy control subjects using two methods – precipitation with polyethylenglycol (PEG) and C1q ELISA method. The concentration of CIC in SLE patients was significantly higher than in healthy controls. In the PEG precipitate of SLE patients, we found higher levels of IgG and DNA antibodies compared to the controls, while the levels of IgA, IgM, C3 and C4 in both groups were comparable. The highest CIC levels and mean levels of IgM, C3, C4 and DNA antibodies in the PEG precipitate of the SLE group were detected in patients with active disease. In patients with cutaneous lupus, the levels of the investigated parameters were higher than in healthy individuals and are comparable with those in SLE patients with inactive disease. In some of the SLE patients, antinuclear antibodies were detected only within the CIC – 28% DNA, 5% Sm and RNP antibodies. The determination of CIC concentration and composition using different methods could help the evaluation of disease activity and prognosis in patients with different forms of lupus.

**Key words:** lupus, circulating immune complexes

S. Monov, R. Rashkov, D. Monova, A. Ivanov and B. Milev. **MRI CHANGES IN PATIENTS WITH INCOMPLETE SYSTEMIC LUPUS ERYTHEMATOSUS**

**Summary:** This study aims at describing the most often MRI changes of the central nervous system in patients with incomplete (subclinical) systemic lupus erythematosus (SLE). There were studied 225 patients with SLE. Data about incomplete SLE were established in 58 of them. Most often changes seen on MRI were multiple lacunar infarctions, mostly localized subcortically and rarely periventricularly and deep in the white cerebral matter.

**Key words:** incomplete systemic lupus erythematosus, magnetic resonance imaging

HELPING PRACTICE

A. Batalov, I. Sheytanov, R. Nestorova and R. Stoilov. **THE ROLE OF ARTHROSONOGRAPHY IN THE MODERN RHEUMATOLOGY**

CASE REPORTS

R. Nestorova, E. Naredo and A. Batalov. **SONOGRAPHIC EVALUATION OF PLICA SYNDROME**

**Summary.** The symptoms of plica syndrome resemble those of other knee joint diseases, such as activated gonarthrosis, retropatellar chondromalacia, meniscus damages, ligament lesions, etc. Until recently, their diagnosing was almost impossible without magnetic resonance tomography (MRT) application. However, during the last years, another noninvasive and harmless method has been progressively applied in European and worldwide clinical practice – this of arthrosonography (ASG). The objective of the presented study is to compare ASG to MRT efficacy in plica syndrome detecting. A clinical case of a 4-year recurrent right-sided gonitis, with provisional diagnosis and short-term response to the treatment administered, is presented. The knee joint alterations in two acoustic windows, longitudinal and transversal, are identified through high resolution ultrasound technique (Logiq 7, General Electric Medical Systems) using multifrequent linear transducer (7-14 MHz). A knee joint MRT-film showing the characteristic for the syndrome clearly visualized plicae is used for comparing the efficacy of the two diagnostic methods. Both transducer accesses identify hypo/anechogenic textured adhesion, deformity and enlargement of suprapatellar bursa and medial parapatellar recessus. On this background, the plicae are visualized as thick hyperechogenic band-like
structures with obviously synovial origin. Similar echotexture is not observed in cases of inflammatory, metabolic and degenerative joint diseases. ASG is a useful screening method in plica syndrome detection. Although rare in rheumatologist’s practice, this disease is commonly taken into account while making differential diagnosis. The typical sonographic finding guarantees the syndromal differentiation from other knee joint diseases. Following the presented case, some more plica syndrome cases were diagnosed using joint echography. The patients were admitted for arthroscopic resection, which is the modern method of definite treatment.

Key words: arthrosonography, plica, magnetic resonance tomodography, knee joint

DRUG THERAPY

A. Toncheva. NEW POSSIBILITIES OF DISEASE-MODIFYING DRUGS IN OA

Summary. Osteoarthrosis is the most common rheumatic disease and its treatment is a medical and socio-economical problem all over the world. In the year 2020, the number of the affected by OA is expected to grow by 57% due to the increase of the average life expectancy. OA is a metabolic active, dynamic process, including destruction and regeneration, metabolic changes and mechanical damage. The deeper understanding of the complex pathogenesis of the disease on a molecular level broadens our therapeutic possibilities and allows early identification and monitoring of the predisposed individuals. At this time, the treatment of OA includes drugs which affect the symptoms (analgetics, NSAID, corticosteroids) and ones that modify the joint structure, thus affecting the morphological changes in OA. Included in the second group are the hondroprotectors (glucosamines, hondroitinsulphate) and the new drug Diacerheine. A number of studies show that glucosaminesulphates (GS) not only boost the hondrocytes’ metabolism by controlling the synthesis of glucosaminoglycans and proteoglycans, but also considerably lower the genetic expression of many of the markers of inflammation and tissue degeneration – IL-1β, IL-6. It is concluded that GS supresses the activation of NFkB and the synthesis of PGE2 which are induced by IL-1β in human hondrocytes in OA. GS also affects the expression and synthesis of NFkB-dependant genes like COX-2. Chondroprotectors are also disease-modifying drugs because during a continuous treatment they considerably slow down the narrowing of the joint space and the formation of osteophytes. Diacerheine is an anthracen carboxylic acid, which suppresses the proinflammatory cytokines IL-1β, IL-6 and TNF-α. It is also a slowly-acting disease-modifying drug for treatment of OA. The ongoing research of the effects of the relatively new and growing group of the disease-modifying drugs in OA creates new therapeutic opportunities.

Key words: osteoarthrosis, glucosaminsulphate, diacerheine

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