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AB0247 LIFE QUALITY AND DEPRESSION LEVEL ASSESSMENT IN PATIENTS WITH RHEUMATOID ARTHRITIS

T. Janković^{1,2}, J. Zvekić-Svorcan², B. Milić³, D. Vuklić⁴, R. Krasnik⁵, S. Subin⁶ on behalf of not. ¹Faculty of Medicine, University of Novi Sad, Special Hospital for Rheumatic Diseases, Rheumatology, Novi Sad, Vojvodina, Novi Sad, Serbia; ²Faculty of Medicine, University of Novi Sad, Special Hospital for Rheumatic Diseases, Rheumatology, Novi Sad, Novi Sad, Serbia; ³Faculty of Medicine, University of Novi Sad, Nephrology and Clinical Immunology, Clinical Center of Vojvodina, Novi Sad, Serbia; ⁴Faculty of Medicine, University of Novi Sad, Novi Sad, Serbia; ⁵Faculty of Medicine, University of Novi Sad, Institute of Child and Youth Health Care of Vojvodina, Novi Sad, Serbia; ⁶General Hospital "DrDjordjeJoanović", Rheumatology, Zrenjanin, Vojvodina, Zrenjanin, Serbia

Background: Depression is a common and significant rheumatoid arthritis (RA) comorbidity that develops under the influence of several factors, the most important being disease activity, pain intensity and degree of disability.

Objectives: The goal of the investigation was to determine existence of depression and assess life quality in patients living with RA.

Methods: The study sample comprised of 150 patients of average age 59.2 years, 79.2% of whom were women and 20.8% were men, who have lived with RA for an average of 9.6 years. For determining disease activity level, Disease Activity Score DAS28 was utilized. Pain intensity and global disease activity were rated using a visual analogue scale ranging from 1 to 100mm. For functional capacity assessments, Health Assessment Questionnaire (HAQ) index was adopted, depression severity was determined through Beck Depression Inventory (BDI), and Serbian version of the health-related quality of life instrument EQ-5D was employed to assess patients' quality of life.

Results: Average DAS28 score for the sample was 4.46 ± 1.32 , suggesting moderate RA activity. Pain intensity was on average scored at 53.2 ± 18.6 , whereas global disease activity was measured at 49.63 ± 20.2 , and the HAQ index of 1.0 ± 0.70 was obtained. According to the BDI, 21.4% of the patients exhibited no signs of depression, whereas 12.9% had mild, 54.3% moderate, and 11.4% severe form of depression. Quality of life, as measured by EQ-5D, was compromised in all life domains, with pain/discomfort, anxiety/depression, inability to partake in usual activities, compromised mobility and self-care most frequently

reported. In patients suffering from moderate and severe depression, high statistically significant positive correlation between depression score and HAQ index was noted. BDI score was statistically significantly positively correlated with the ratings on the EQ-5D scales pertaining to self-care, usual activities, pain/discomfort, and anxiety/depression.

Conclusion: Depression symptoms are common in patients with RA and can compromise quality of life in all life domains. When assessing disease severity and general status of patients with RA, depression symptoms should also be considered, given their high prevalence and influence on patients' everyday life.

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AB0248 PREVALENCE OF THYROID PEROXIDASE ANTIBODIES IN THE NORMAL POPULATION AND IN PATIENTS WITH RHEUMATOID ARTHRITIS AND THEIR PREDICTIVE VALUE FOR THE EFFECTIVENESS OF TREATING RHEUMATOID ARTHRITIS

M. Kedves¹, J. Csitos², K. Töröcsik², A. Rideg², I. G. Makkos², D. Balaton², A. Ozsvár², L. Farkas², J. Gál². ¹Bács-Kiskun County Hospital, Rheumatology, Kecskemét, Hungary; ²Bács-Kiskun County Hospital, Rheumatology, Kecskemét, Hungary

Background: Rheumatoid arthritis (RA) is sometimes associated with autoimmune thyroid disease (AITD)¹. However the relation between RA autoantibodies and thyroid autoantibodies is doubtful. However, there is no reliable data on whether concomitant positivity of level of anti-TPO in rheumatoid arthritis patients alters the efficacy of RA therapy.

Objectives: To study the presence of level of autoimmune thyroid markers (thyroid peroxidase antibodies -anti-TPO-), in clinically and serologically different forms of RA, compared to serum level of anti-TPO in control population, and to study whether anti-TPO positivity in any RA group influences the risk of high disease activity and also affects the likelihood of achieving DAS-28 remission.

Methods: 1428 patients were included in the retrospective single-center study using the database of the Arthritis Registry of Kecskemét (ARK). 772 RA patients, subclassified according to the presence of RF and anti-CCP into seropositive RA patients (positive to one or both seromarkers), and seronegative RA (negative to both seromarkers), and 656 patients were included as control group without autoimmune diseases.

Results: Elevated level of anti-TPO was found in 199/772 (26%) RA patients, compared to controls 32% (209/656). Furthermore, the level of anti-TPO was similar in seropositive and seronegative groups (24% and 27% respectively). RA patients treated with biological therapy presented higher level of anti-TPO in 28%, similarly to RA patients without biological therapy (24%). There was no relevant difference in level of anti-TPO among the groups with different disease activity (high activity: DAS28 > 5.1; - 24%; moderate activity: DAS28 ≤ 5.1; > 3.2; - 25%; and in low activity DAS28 ≤ 3.2; - 28% respectively).

Conclusion: Our present data show that the elevated level of anti-TPO is similarly in patients with serologically different forms of RA and in the control group. The presence of anti-TPO antibody does not affect the severity of RA and the results obtained with the treatment, including that anti-TPO positivity does not increase the need for biological therapy.

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AB0249 POSITIVE EFFECT OF ANTIRHEUMATIC THERAPY ON THE COURSE OF CHRONIC HEART FAILURE IN PATIENTS WITH EARLY RHEUMATOID ARTHRITIS

L. Kirillova¹, D. Novikova¹, T. Popkova¹, Y. Gorbunova¹, E. Markelova¹, A. Volkov¹. ¹V.A. Nasonova Research Institute of Rheumatology, Moscow, Russian Federation

Background:

Objectives: to evaluate the effect of antirheumatic therapy according to the "treat to target" strategy on the course of chronic heart failure (CHF) in patients with early RA.

Methods: The study included 22 patients CHF with valid diagnosis of RA (criteria ACR / EULAR, 2010), 17 (77%) of women, median (Me) age - 60 years, Me disease duration - 7 months; IgM seropositive for rheumatoid factor 10 (45%) and / or antibodies to the cyclic citrulline peptide 22 (100%), DAS28-5.6 [4.8;6.5]. CHF verified in accordance the recommendations for the diagnosis and treatment of CHF Society of Specialists in Heart Failure (2013). The concentration of NT-proBNP

was determined by electrochemiluminescence. For all patients was started methotrexate (MT) therapy with a rapid increase in the dose to 30mg per week subcutaneously. If the MT was not effective enough, after 3 months a biological Disease-Modifying Anti-Rheumatic Drug (bDMARDs) was added to the therapy, predominantly TNF-alpha inhibitors. After 18 months, 10 (45%) patients were in remission and low disease activity, 6 (60%) of patients underwent MT therapy in combination with bDMARDs.

Results: In baseline CHF with preserved EF was revealed in 21 (95%) patients, in 1 patient - CHF with reduced EF. After 18 months there was a positive dynamics of improvement of clinical symptoms, echocardiographic indicators (decrease the size of the left atrium (LA) and the index of end-systolic volume of LA, IVRT, E' LV), diastolic function of the left ventricle (LV). There was no decompensation of CHF. LV diastolic function normalized in 7 (32%) patients who reached the target level of blood pressure, remission (n = 5) and low (n = 2) disease activity, mainly in the treatment of MT and bDMARDs. In patients with RA and CHF, the level of NT-proBNP decreased from 192.2 [151.4; 266.4] to 114.0 [90.4; 163.4] pg / ml (p <0.001), normalized in 16 of 22 (73%) patients (p <0.001) with remission or low RA activity. In 5 (22%) patients, the clinical manifestations of CHF regressed, LV diastolic function and NT-proBNP level normalized.

Conclusion: In patients with early RA and CHF anti-rheumatic therapy improves the clinical course of CHF. There were an improvement in the clinical course of CHF, diastolic function of the left ventricle and a decrease in NT-proBNP.

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AB0250

OSTEOPOROSIS, VERTEBRAL FRACTURES AND NON-ALCOHOLIC FATTY LIVER DISEASE IN RHEUMATOID ARTHRITIS: ARE THEY ASSOCIATED?

H. Azzouzi¹, B. Touil¹, L. Linda¹. ¹Mohammed VI University Hospital, Rheumatology, Oujda, Morocco

Background: Non-alcoholic fatty liver disease (NAFLD) is a frequent finding in rheumatoid arthritis (RA). It has been advanced that NAFLD and vertebral fractures (VF) are associated in healthy men recently(1).

Objectives: The aim of this study was to evaluate NAFLD association with BMD and VF in RA population.

Methods: Cross-sectional study was made at our rheumatology department, patients with RA have been assessed for NAFLD with ultrasonography and osteoporosis (hip and lumbar BMD) with DXA device. Patients with secondary liver disease (viral, alcoholic) were excluded. Data about osteoporosis risk factors, clinical features and laboratory tests (liver enzymes, lipid profile, hemoglobin, ferritin, etc) were collected. Anterior vertebral fractures (VF) were assessed by lateral spine radiographs. Comparison of patients with and without NAFLD was done by SPSS.20. Multiple regressions were made to explain osteoporosis and VF with models including NAFLD and other risk factors. Significance was defined by p under 0.05.

Results: We have included 172 RA patients, mean age was 55.4±11.9 years. Ninety per cent were females. Their average BMI was 26.8±5.47. Hypertension was diagnosed in 23.8% and 16.3% had diabetes. Forty per cent (40.1) had osteoporosis, 27.3% (47) had NAFLD. RA patients with NAFLD were older (p=0.04), obese (p=0.003), frequently associated to diabetes (p=0.02), Sjogren's disease (p=0.001), higher total cholesterol (p=0.02) and gamma-glutamyl transferase (GGT) (p=0.002). Comparison tests did not reveal any associations with fractures, BMD or osteoporosis. In multiple regression models, patients with NAFLD and altered liver enzymes were associated to VF (p=0.04, OR=4.7[1.05-21.69] but not to BMD when adjusted on age (p=0.02), BMI (p=0.02), diabetes, menopause and Sjogren's disease.

Conclusion: NAFLD was frequent among our RA patients and was associated to VF prevalence in this study but not to BMD.

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AB0251

SARCOPENIA IN MOROCCAN POPULATION WITH RHEUMATOID ARTHRITIS: PREVALENCE AND PREDICTIVE FACTORS

E. Jalila¹, H. Azzouzi¹, L. Linda¹. ¹Mohamed VI University Hospital, Mohammed I University, Rheumatology, Oujda, Morocco

Background: Patients with rheumatoid arthritis (RA) were at risk for altered body composition with higher prevalence of sarcopenia compared to the general population. Low lean muscle mass may constitute an additional risk factor for altered bone density in RA patients.

Objectives: We aimed to study the prevalence of sarcopenia and to assess its predictive factors in Moroccan patients with RA.

Methods: We conducted a cross-sectional study over two months in our department of rheumatology. All RA patients fulfilled ACR/EULAR 2010 criteria. We performed a whole-body dual-energy X-ray absorptiometry (DXA) to measure lean mass, fat mass and bone mass in the whole body and body parts. The appendicular skeletal muscle mass was assessed using the sum of skeletal muscle mass in the arms and legs. The relative skeletal muscle mass index (RSMI) was calculated from the appendicular skeletal mass divided by the square of the patient's height (kg/m²). According to Baumgartner et al, sarcopenia was defined as a relative SMI <5.5 kg/m² on women and <7.26 kg/m² on men. Body mass index (BMI) was measured and patients were classified according to World Health Organization. Disease activity and functional disability were measured using the 28-joint Disease Activity Score (DAS28) with CRP and the Health Assessment Questionnaire (HAQ). Comorbidities and medication use including corticosteroids were also recorded. Data was entered and processed using the IBM SPSS Statistics 20. A univariate analysis as well as multivariate regressions were carried out to assess the association between sarcopenia and lumbar spine and femoral neck (FN) bone mineral density (BMD) and RA characteristics.

Results: We included 70 (87.5%) women and 10 (12.5%) men with a mean age of 53.59 ±10.96 years old. They had a mean disease duration of 12.35± 8.68, a mean DAS 28 CRP of 2.64±1.34, a mean HAQ of 0.94±0.63 and a mean RSMI of 5.75±1.17. Women had a mean RSMI of 6.33±1.04 while men had a mean RSMI of 5.66±1.17. The prevalence of sarcopenia in our population was 47.4% (37), of whom 81.1% (30) women.

In univariate regression analysis, sarcopenia was associated with normal BMI (OR: 8.59, 95% CI [3.054-24.182], p= 0.000), DAS 28 CRP (OR: 1.78, 95% CI [1.203-2.657], p= 0.004), HAQ (OR: 2.15, 95% CI [1.165-5.433], p= 0.019), lumbar spine BMD (OR: 0.001, 95% CI [0.00001-0.043], p= 0.0004) and FN BMD (OR: 0.000006, 95% CI [0.000-0.002], p= 0.00008 at right FN and OR: 0.00009, 95% CI [0.000001-0.010], p=0.000 at left FN, respectively).

In multiple regression analysis, sarcopenia was associated with normal BMI (OR: 11.56, 95% CI [2.754–48.598]), p=0.001 and FN BMD (OR: 0.00, 95% CI [0.000–0.084], p= 0.006).

Conclusion: In the present study, sarcopenia was common among RA patients and associated with normal BMI and femoral neck BMD, emphasizing the importance of this modifiable risk factor. Further studies are needed to identify effective means to improve lean muscle mass in patients with RA.

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AB0252

ASSOCIATION OF FAT MASS AND ITS DISTRIBUTION WITH BONE MINERAL DENSITY FOR RHEUMATOID ARTHRITIS PATIENTS.

O. Lamkhanat¹, H. Azzouzi¹, B. Touil¹, L. Linda¹. ¹Centre Hospitalier Universitaire Mohammed VI, Rheumatology, Oujda, Morocco

Background: Bone mineral density (BMD) and body mass are closely associated. lean mass(LM) and fat mass(FM) account for approximately 95% of body mass[1].

Objectives: We aimed to study the association between body fat mass and its distribution with femoral and lumbar bone mineral density in rheumatoid arthritis (RA) patients.

Methods: The present RA population-based cross sectional study done on 2019 was part of our rheumatology departement. Clinical data, femoral and lumbar BMD, body fat mass (BFM), android fat mass(AFM), gynoid fat mass (GFM), visceral fat mass (VFM) measured with dual energy X-ray absorptiometry (DXA: Hologic®) and results of laboratory tests were collected. Our statistical analysis was based on descriptive study and linear regression with SPSS20.