Objectives: The aim of this study was to evaluate the prevalence of falls and its association with clinical data, disease-related outcomes and physical performance tests.

Methods: Cross-sectional study including patients with RA, followed in the Rheumatology Department over a period of 1 month in 2018. The following parameters were evaluated: clinical aspects; fall occurrence in the previous 12 months; pain on a visual analogue scale (VAS); RA disease Activity Score 28 (DAS28)/erythrocyte sedimentation rate (ESR); Functional capacity assessed by the Health Assessment Questionnaire (HAQ); anxiety and depression by the Hospital Anxiety and Depression Scale (HADS) and Physical performance, assessed by 3 tests, the Timed Up and Go (TUG), one leg standing balance (OST) and sternal nudge test (SNT).

Results: Forty-eight patients were enrolled, the average age was 55.8 ± 13.9 and the sex ratio was 0.14. The average disease duration was $13.49 \text{ years} \pm 9.12$. The average DAS28 was 4.63 ± 1.19 and HAQ was 0.77 ± 0.88 . Falls were reported by 44.7% of patients: 27.7% had one fall and 17% had ≥ 2 falls. Patients had a fractures history in 10.9% of cases and dislocations in 6.5% of cases. The HAQ ($p=0.04$) and c reactive protein ($p=0.01$) was associated with fall history; the other parameters (Gender, number of medications, age, disease activity and physical tests) showed no associations with history of falls. Physical performance was decreased to: 58.4% for TUG test, 61.7% for OST and 36.2% for SNT. The worst performance in physical tests (TUG, OST and SNT) was associated with older age, higher erythrocyte sedimentation rate, higher HAQ, and increased DAS28 ($p<0.05$). In addition, hips and especially knees involvement was significantly associated with TUG ($p=0.03$) and OST test ($p=0.003$). TUG test was significantly associated with depression ($p=0.04$). The OST test was associated with higher disease duration ($p=0.004$), VAS ($p=0.006$) and tender joints ($p=0.001$). There was no association between number of falls and any of the physical performance tests.

Conclusion: It was observed that the occurrence of falls is quite common in this population. The occurrence of falls in this sample of rheumatoid arthritis patients bears no relation to disease activity or physical performance tests. But, falls were associated with functional capacity.

REFERENCE:

- [1] Stanmore EK, Oldham J, Skelton DA, O'Neill T, Pilling M, Campbell AJ, et al. Risk factors for falls in adults with rheumatoid arthritis: a prospective study. *Arthritis Care Res* 2013;65:1251–8.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.5038

THU0131 EFFECT OF METABOLIC SYNDROME ON THE COURSE OF RHEUMATOID ARTHRITIS AND CARDIOVASCULAR RISK

Svetlana Lapshina^{1,2}, Liutsiia Feiskhanova¹, Luciya Kupkenova¹, Ridiya Sharafutdinova¹, Aigul Akhmetzianova¹. ¹Kazan State Medical University, Kazan, Russian Federation; ²Republic Clinical Hospital, Kazan, Russian Federation

Background: Both rheumatoid arthritis (RA) and metabolic syndrome (MS) have an inflammatory component in the pathogenesis and both aggravate cardiovascular risks.

Objectives: The aim is to study the effect of MS on the course of RA and the increase in cardiovascular risk in these patients.

Methods: 100 patients (men 7%, women 93%) aged 21 to 81 years (average age 55 ± 12.4) with reliable RA were examined. High activity in DAS28 scale was observed in 68%, moderate - in 30%, low - in 2%, rheumatoid factor (RF) positivity - in 88%, ACCP - 81%. Disease-modifying antirheumatic drugs received 78%, glucocorticosteroids 60% of patients. Arterial hypertension (AH) was present in 45% of patients. MS according to NCEP/ATPIII criteria was identified in 59 patients, according to its presence, patients were divided into 2 groups (MS+ and MS-). Patients were examined in standard laboratory tests, all of them had echocardiogram.

Results: In the presence of MS, RA activity was significantly higher (DAS28 4.2 ± 0.5) compared with patients without it (DAS28 3.5 ± 0.6) most of all because of pain syndrome ($p<0.01$). A correlation was observed between the presence of MS and pain on a visual analogue scale and the number of painful joints ($p<0.05$). However, there was no significant difference according to the level of the ESR, CRP, the presence of the RF, the X-ray stage of RA. There were no differences in the range of

received therapy, but the dose of prednisone was higher in the MS+ group (7.8 ± 3.5 vs 6.4 ± 3.69 , $p<0.05$).

Systolic blood pressure (BP) was higher in the MS+ group (128.3 ± 17.3) vs MS- (119.3 ± 15.9). The level of BP correlated ($p<0.05$) with the severity of pain. The verified AH was present in 42 (71.2%) patients of the MS+ group (1 stage -2, 2 stage -24, 3 stage -16 patients) and in 3 (7.3%) patients of the MS- group (1 stage in 1 patient, 2 stages in 2 patients). The cholesterol level was higher in the MS+ group 5.1 ± 1.1 compared with the MS- group 4.6 ± 0.6 ($p<0.01$). There was observed a persistent tendency ($p<0.01$) in increasing of the mass index of the left ventricle myocardium according to echocardiogram. In patients with MS+, hypertrophy of the left ventricular myocardium was detected according to echocardiogram even with a normal level of BP.

Conclusion: The presence of MS in patients with RA is associated with a higher activity of RA most of all because of pain syndrome. At the same time, pain syndrome correlates with the level of blood pressure. The combination of MS and RA leads to an increase of cardiovascular risk factors: cholesterol level and myocardial hypertrophy, which causes the need of using the echocardiography for this group of patients.

REFERENCE:

- [1] rheumatoid arthritis, metabolic syndrome.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.7822

THU0132 EVALUATION OF CARDIOVASCULAR RISK FACTORS IN PATIENTS WITH RHEUMATOID ARTHRITIS TREATED WITH BIOLOGICAL AGENTS: 3-MONTH FOLLOW-UP

Giorgos Papamichail¹, Theodora Markatseli², Athanasios Georgiadis², Vasileios Xydias³, Haralampos Milionis¹, Alexandros Drosos², Paraskevi Voulgaris².

¹Internal Medicine, University of Ioannina, Greece, Department of Internal Medicine, Medical School, University of Ioannina, Ioannina, Greece, Ioannina, Greece; ²Rheumatology Clinic, University of Ioannina, Ioannina, Greece, Department of Internal Medicine, Medical School, University of Ioannina, Ioannina, Greece; ³Radiology, University of Ioannina, Greece, Department of Radiology, Medical School, University of Ioannina, Ioannina, Greece

Background: Systemic inflammation is an additional and independent predictor of cardiovascular disease (CVD) in rheumatoid arthritis (RA). It is worth mentioning that lipid levels, blood pressure and other major risk factors of CVD constitute a wide field of investigation in case of treatment with biological disease-modifying anti-rheumatic drugs (DMARDs).

Objectives: The aim of this study is to assess the impact of biological agents on markers of CVD risk in patients with RA.

Methods: This is a prospective, observational study which included biologic-naïve RA patients treated with synthetic DMARDs, who had a negative history of CVD. Thirty-one patients and 31 healthy matched-controls (for gender, age and smoking) were compared for total cholesterol (TC), high-density lipoprotein cholesterol (HDL-c), low-density lipoprotein cholesterol (LDL-c), triglycerides (TGs), Apolipoprotein A1 (ApoA1), Apolipoprotein B (ApoB) and Lipoprotein A (LpA). Additionally, an ultrasonographic measurement of intima-media thickness (IMT) of carotids was performed by an experienced sonographer to all patients in order to detect the presence of atherosclerosis at baseline. Furthermore, in a subgroup of 19 of these 31 RA patients, the parameters we previously reported (except for IMT) were compared between baseline and a 3-month follow up. We also compared disease activity indexes [disease activity score (DAS28), erythrocyte sedimentation rate (ESR), C-reactive protein (CRP)] at these predefined time-points.

Results: As regards the demographic characteristics of 31 RA patients, the mean (SD) age was 54.7 (14.05) years, disease duration was 4.5 (1.3) years, there were 11 (35.5%) men and 20 (64.5%) women and 6 (31.6%) smokers. As far as the immunological profile of patients is considered, 17 (54.8%) were RF(+) and 8 (25.8%) ACPA(+). The comparison of the parameters between RA patients and matched-controls revealed an increased IMT in RA patients [0.9 (0.17) vs 0.6 (0.13) mm; $p<0.001$], while the other parameters involving the lipid profile did not differ among the two groups.

In the subgroup of 19 patients, there was a significant increase in mean (SD) HDL-C and ApoA1 levels from baseline to 3-month follow-up [55.3 (15.44) vs 61.68(15.3) and 163.16(28.89) vs 173.11(29.65) respectively; $p<0.05$]. There was also a reduction in mean systolic blood pressure [137.89(14.36) vs 130.53(12.68); $p<0.05$], diastolic blood pressure [81.63 (6.8) vs 77.63(6.09); $p<0.05$], ESR [25.53(18.57) vs 19.84(16.44); $p<0.05$] and DAS28 score [3.41(1.14) vs 2.62(1.12); $p<0.05$]. No