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?

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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

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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.

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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.