Background: Sarcopenia is a muscle disease which is characterized by loss of muscle mass and function. This condition is associated with chronic disease and ageing which predicts inability, hospitalization and death.

Objectives: Describe sarcopenia prevalence and risk factors in patients with rheumatoid arthritis (RA) over 65 years of age.

Methods: Design: A case-control study.

Subjects: Cases: Recruitment was performed by random sampling between patients over 65 years of age with RA (ACR/EULAR 2010 criteria) attended at 4 Spanish University Hospitals.

Controls: Recruitment of subjects without rheumatoid disease was performed asking for case patients who attended to medical center with a similar-age (age of range ± 5 years) and same-gender person from same social or family environment.

Variables: The main variable was sarcopenia which was defined according to European Working Group on Sarcopenia in Older People (EWGSOP) 2019. Sarcopenia risk factors assessed were: nutritional status, malnutrition, measured with Mini Nutritional Assessment (MNA), dual-energy x-ray absorptiometry (DEXA) in spine and hip to osteoporosis screening, toxic habits, comorbidities and Charlson index, physical activity measured with Global physical activity questionnaire (GPAC) and Short Physical Performance Battery (SPPB).

Other variables were: haemoglobin, calcium, D and B12 vitamins, total proteins, albumin, C reactive protein, body mass index (BMI), polimedications, quantity of life measured with EQ-SD and RA related factors, activity disease measured with DAS28, SDAI and CDAI; physical function measured with HAQ (Health Assessment questionnaire) to explore functional disability. All patients took a clinical examination, assessment of the anamnestic data, X-ray of hands, feet. Assessment Questionnaire) to explore functional disability. All patients took a clinical examination, assessment of the anamnestic data, X-ray of hands, feet.

Results: 76 patients and 76 controls were included in the study. The average age was 78.3% (74,7 ± 6,98 of media and 32,1 ±1% men, with age 70,1 ±3,78 of media. In comparison with controls, RA patients presented more frequency of sarcopenia (30 [19,53%] vs 6 [3,94%]; p=0.005). RA patients who presented sarcopenia, were upper average age (p=0.001), worse score in EQ5D (0,27 ± 0,28 vs. 0,54 ± 0,25; p=0.001) and worse adherence to treatment (p=0.018), worse score in EQSD (0.27 ± 0.28 vs. 0.54 ± 0.25; p=0.001) and Visual analogic scale VAS EQ5D (45,7 ± 17,4 vs. 56,9 ± 17,6; p=0.035).

By the way, RA patients presented lower levels of total proteins (p=0.018), worse results in MNA (p=0.001) and they performed less physical activity by GPAQ (p=0.011). Multivariate analysis was performed to identify factors associated to sarcopenia in RA.

OR/IC p
Age, years 1,213 (1,041-1,414) 0,014
Proteins (gr/dL) 0,185 (0,036-0,958) 0,444
DAS28 2,146(1,076-4,881) 0,030
R2=0,37

Conclusion: Sarcopenia is more prevalence in over 65-years-old RA people.

Discourse of Interests: None declared


Background: Hyperuricemia associated with rheumatoid arthritis (RA) has been reported to be a risk factor for cardiovascular disease. It has been reported that uric acid (UA) levels decrease with the use of leflunomide and increase with tumor necrosis factor (TNF) inhibitor therapy. However, the effects of long-term biological disease-modifying antirheumatic drugs (bDMARDs) therapy and the effects of non-TNF inhibitor biologic therapy on UA levels have not been reported.

Objectives: We aimed to investigate the changes in UA levels during the use of TNF inhibitors and non-TNF inhibitors therapy.

Methods: Patients with RA treated with bDMARDs from 2008 to 2018 were studied based on the All Showa University of RA (ASHURA) database. The association between uric acid level reduction and treatment was evaluated.

Of 629 patients treated with the bDMARDs, 256 patients with available uric acid levels medical records were included. The following background factors were investigated: age; sex; type of bDMARDs; dosage of methotrexate and prednisolone; usage of conventional synthetic DMARDs, dyslipidemia drugs and nonsteroidal anti-inflammatory drugs; body mass index; smoking history; HbA1c; presence or absence of hypertension and dyslipidemia; and serum creatinine, C-reactive protein, and matrix metalloproteinase-3 levels. We also used the simplified disease activity index (SDAI) to evaluate RA disease activity. The analysis was performed in two groups, TNF inhibitor-treated group (148 patients) and non-TNF inhibitor-treated group (108 patients, tocolizumab and abatacept). The primary endpoint was UA levels before and after 6 months and 1 year, which was determined using the repeated-measures analysis of variance (ANOVA) and secondary endpoint was proportion of patients with hyperuricemia (uric acid level of 7 or higher was defined), determined using spearman’s correlation coefficient by rank test.

Results: In TNF inhibitor-treated group, the UA levels were not increased from 4.9 ± 1.4 (mg/dl) to 4.9 ± 1.4 and 5.1 ± 1.7 before treatment and after 6 months and 1 year, respectively (p=0.50). The number of patients with hyperuricemia increased from 7 to 12 and 16 (p=0.026). In non-TNF inhibitor-treated group, the UA levels were not increased from 5.2 ± 1.4 (mg/dl) to 5.2 ± 1.4 and 5.3 ± 1.4 (p=0.78). The number of patients with hyperuricemia increased from 8 to 12 and 16 (p=0.193). There was a difference in the type of drug, but no difference in the duration of administration by repeated-measures ANOVA.

Conclusion: Our study suggests that TNF inhibitor therapy may affect increased percentage of patients with hyperuricemia. On the other hand, non-TNF inhibitor therapy may not affect increased percentage of patients with hyperuricemia and bDMARD treatment has a mild effect on UA levels in patients with RA.

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Background: Adherence is defined as the degree of agreement between a patient’s behavior (taking medication, changing lifestyle, or adhering to treatment recommendations) and the prescriptions of a physician or medical staff. The patient’s adherence to treatment is an important factor influencing the effectiveness of therapy, the course of the disease. In Russia, a universal questionnaire was developed to assess the level of adherence to drug therapy, medical care, lifestyle changes, and general adherence to treatment.

Objectives: To analyze the adherence to treatment, medical care and recommendations for lifestyle changes in patients with RA.

Methods: The cross-sectional study included 88 women with RA (ACR/EULAR 2010), the mean age - 63.0±8.1 years, the duration of the disease - 22.4±9.3 years. Adherence was assessed using the Russian questionnaire, which determines the low, average, and high levels of adherence to drug therapy, medical care, recommendations for lifestyle changes, and general adherence to treatment. All patients completed The Hospital Anxiety and Depression Scale (HADS) for the detection of anxious and depressive symptoms, the Russian version of HAQ (Health Assessment Questionnaire) to explore functional disability. All patients took a clinical examination, assessment of the anamnestic data, X-ray of hands, feet.
Results: Most of RA patients had an average level of adherence to drug therapy - 51 (58%); medical care - 45 (51%); low level of adherence to lifestyle recommendations – 63 (72%). Assessment of general adherence to treatment showed: 30 (34%) people had a low level of adherence, 51 (58%) – medium, and 7 (8%) - high. Elderly age (p=0.00), anxiety (p=0.02) and depression (p=0.04) were associated with low adherence to medical care. The use of glucocorticoids (GCs) was associated with high adherence to drug therapy (p=0.01). The number of patients taking disease-modifying anti-inflammatory drugs and biologic disease-modifying antirheumatic drugs, functional disability (HAQ) and the radiographic stage of RA (classified according to Steinbrocker) did not differ significantly in patients with different levels of adherence.

Conclusion: Most of RA patients had an average level of adherence to drug therapy, medical care, and a low level of adherence to recommendations for lifestyle changes. Patients taking GCs have a high level of adherence to drug therapy. Mental disorders (anxiety and depression) and elderly age are associated with low adherence to medical care.

Disclosure of Interests: None declared


AB0258

STATE OF ADIPOCYTOKINES IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Adipose tissue is actively involved in the development of systemic inflammation in rheumatoid arthritis (RA), producing proinflammatory cytokines and adipokines that can independently modulate inflammatory and destructive processes in the joints [1-2].

Objectives: To establish the relationship between serum adiponectin and leptin in patients with RA with clinical and laboratory indicators of disease activity and the results of ultrasound examination (US) of the hand joints.

Methods: The study included 72 women with RA according to the ACR / EULAR criteria of 2010 who visited the adaptation therapy clinic of Orenburg State Medical University. The mean±SD age was 46.4±7.5 years and the mean±SD disease duration was 7.9±4.4 years. Clinical study of patients with RA included an assessment of the tender joint count (TJC) (11±3.6), the swollen joint count (SJC) (4.6±2.7), duration of morning stiffness (107.5±49.3 min) and the patient’s global assessment according to a 100-millimeter visual analogue scale (46.2±23.5 mm). Disease activity was assessed by the DAS28 index (4.4±1.7).

The mean body mass index (BMI) in patients with RA was 26.3 ± 6.2 kg/m². We evaluated for the following laboratory tests: rheumatoid factor (RF), antibodies to cyclic citrullinated peptide (A-CCP), C-reactive protein (CRP), tumor necrosis factor-α (TNF-α), interleukin-17 (IL-17), adiponectin and leptin in blood serum. We carried out US to determine the inflammatory and destructive changes in 30 joints in each RA patient (wrist joints, metacarpophalangeal, proximal and distal interphalangeal joints and the first interphalangeal joint on the palm and dorsal sides of both hands) by the device “Phibes Eqiq 7” with linear transducer with a frequency of 5-18 MHz and the use of Power Doppler (PD) which included the identification of synovitis, tenosynovitis, erosive changes in the hand joints. At the time of examination, 30 (41.7%) patients with RA received therapy that included methotrexate (MTX); 9 patients (12.5%) intox glucocorticosteroids (GCS) perorally, MTX+GCS – 15 patients (20.8%). The program STATISTICA, 12.0 was used for statistical analysis.

Results: The level of serum adiponectin negatively correlated with the level of CRP (r=-0.3, p < 0.05). At the same time, significant correlations were found between the number of erosions of the joint space and the level of adiponectin (r=0.5, p < 0.0001). Additionally, additional correlations were noted between adiponectin levels and the intake duration of MTX (r=0.3, p < 0.05) and GCS (r=0.4, p < 0.00001). We found a positive correlation between the level of leptin and BMI (r=0.5, p < 0.00001). In addition, there were significant correlations between the level of serum leptin and the morning joint stiffness duration (r=0.4, p < 0.00001), TJC (r=0.5, p < 0.00001), as well as the level of CRP (r=0.4, p < 0.00001) and the DAS28 index (r=0.4, p < 0.00001) in patients with RA. An increase in IL-17 concentration was associated with an increase in leptin levels (r=0.3, p < 0.05) in RA patients. However, we did not find a significant correlation between serum adipokine concentrations and RF and A-CCP levels.

Conclusion: Level of adiponectin is associated with pronounced destructive changes in the joints and the intake duration of MTX and GCS. There is a positive relationship between the level of leptin and indicators of disease activity (TC level of CRP, DAS28-CRP index) and an increased blood flow during Doppler imaging, which indicates its role as a proinflammatory cytokine.

REFERENCES:

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AB0259

THE IMPACT OF LOCKDOWN IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: The COVID-19 pandemic has impacted on face to face assessments of patients with rheumatic diseases, including rheumatoid arthritis (RA) and telemedicine has offered a valid opportunity to follow these patients. DEDI-CARE is a Patient Support Program (PSP) which has been active at our center since 2016, which allows the telemonitoring of PROs (Patient Reported Outcomes) for patients being treated with abatacept. Since 2016, 98 RA patients followed at out Unit entered the DEDICARE program. During COVID19 pandemic these patients continued their monitoring using this PSP.

Objectives: To evaluate the impact of the first COVID wave on PROs and CROs (Clinical Reported Outcomes) in patients with RA included in the DEDICARE programme

Methods: Data collected in the dedicated platform three months before (from December 2019 to February 2020, pre-lockdown), during (from March 2020 to May 2020, lockdown) and after (from June 2020 to August 2020, post-lockdown) the first lockdown period in Italy were compared. In detail DAS28 (CRP, ESR), CDAI and SDAI were evaluated before and after the lockdown period; while VAS-sPA, Global Health (GH); Patient Global Assessment of Disease Activity (PGA); Health Assessment Questionnaire (HAQ); Functional Assessment Chronic Illness Therapy (FACIT) were evaluated pre, during e post lockdown with the DEDICARE platform.

Results: 36 RA patients, all females, were included in the study; mean age was 62.4 (32-85) years; mean disease duration 15.5 (5-38) years; 18 were ACPO and RF+. All patients were treated with abatacept, 13 as monotherapy and 23 in association with csDMARDs. No patients had COVID19 disease during the evaluated period. A significant worsening of global health and patient global assessment of disease activity was observed; while no differences were observed regarding the CROs and other PROs (Figure 1)

Conclusion: In the present study we were able to compare PROs in patients with RA before and after the first COVID wave in Italy. While no significant changes in disease activity were observed, patients experienced an increased perception of disease activity and a decline in their overall health status which began during the lockdown and continued over the following 3 months. This may highlight a discordance between the patient and the physician perception of the disease, which may partly due to the psychological impact of pandemic on the general perception of health particular in patients with chronic diseases. Since this discrepancy may have consequences on disease management, and particularly on treatment adherence, there is a need to promote studies to better understand the reasons for these discrepancies and to improve the patient perception of their disease particularly in difficult situations such as COVID19 pandemic.

REFERENCES: