which was defined as the most recent IORRA survey before planning pregnancy.

Results: There were 40 patients in the PP group (average 32.2 years, disease duration 5.7 years, DAS28-CRP 1.7, J-HAQ 0.26), and 120 patients in the control group (average 32.4 years, disease duration 5.9 years, DAS28-CRP 1.7, J-HAQ 0.21). The proportion of user and dosage of MTX and glucocorticoid (GC) and bDMARDs user at baseline were comparable between the groups (MTX: PP 87.5% [8.9 mg/week], control 85.0% [8.8 mg/week]; GC: PP 32.5% [3.8 mg/day], control 32.5% [4.4 mg/day]; bDMARDs: PP 40.0%, control 27.5%); DAS28-CRP at year 3 of the PP group elevated and was higher than the control group (PP 2.3, control 1.7, p<0.01), while J-HAQ was stable over the observation period and did not differ significantly at year 3 (PP 0.21, control 0.22, p=0.92). At year 3, the proportion of patients taking MTX was lower and taking GC was higher in the PP group than those in the control group (MTX: PP 36.7%, control 76.7%, p<0.01; GC: PP 70.0%, control 25.6%, p<0.01). The proportion of patients taking bDMARDs was not different in both groups (PP 36.7%, control 32.6%, p=0.68).

Conclusion: Physical function in pregnancy planning patients with RA did not deteriorate as well as the control patients in clinical settings.

References:

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Conclusion: The mechanism of increased cardiovascular risk in RA is not well understood and is independent of traditional CV risk factors. Intra-media thickness of the common carotid wall measured by ultrasonogram is a safe and useful biomarker of early stage atherosclerosis that correlates with coronary involvement; and it correlates with severity and duration of disease. Several studies have shown a relationship between inflammation markers, endothelial dysfunction markers, and carotid involvement. (1)

Objectives: To determine the presence of inflammation biomarkers and its relationship with subclinical atherosclerosis measured by carotid ultrasound, and with the clinical characteristics in patients with established Rheumatoid Arthritis (RA)

Methods: Descriptive, cross sectional, prospective study, in a Paraguayan cohort of patients with RA meeting ACR/EULAR2010 criteria. This study had two phases: the first one, included a standardized questionnaire according to the variables included in the Cardiovascular Risk project (PINV15-0346), from the National Sciences and Technology Council (CONACYT), and physical examination; the second one included laboratory sample collection performed by a specialized laboratory for serum biomarkers measurement for cardiovascular risk prediction (i.e endothelin, alpha-TNF, E-selectin, homocysteine, apolipoprotein, fibrinogen, and high sensitivity-CRP levels) and carotid ultrasound evaluation by a trained specialist, to evaluate subclinical atherosclerosis. Subclinical atherosclerosis was defined as carotid intra-media thickness (CIMT) >0.9mm and/or presence of carotid plaques. All patients signed informed consent. SPSS 23rd version was used for data analysis. Quantitative variables were presented as means and qualitative as frequencies. Chi square test was performed for comparisons between dichotomous variables and Student for continuous, and p ≤ 0.05 for statistical significance.

Results: 100 patients were included, 87% were women, mean disease duration 130.9±102.8 months, 77% were RF positive, and 84.4% were ACPA positive, 43.4% had bone erosions, mean ESR-DAS28 was 3.42±1.1; 30% had remission criteria. 39% had extra-articular manifestations. 43.4% had bone erosions, mean ESR-DAS28 was 3.42±1.1; 30% had remission criteria. 39% had extra-articular manifestations.

Elevated serum biomarkers were found: fibrinogen >400 mg/dL 88.2%, high sensitivity-CRP (hs-CRP) >5 mg/dL 42.9%, endothelin >2ng/mL 20%, alpha-TNF >15.6 pg/mL 13.1%, E-selectin >7.9 pg/mL 6.3%, 25% had CIMT >0.9 mm and mean CIMT was 0.68±0.25 mm. 27.14% had carotid plaques. Patients with CIMT>1mm had higher frequency of family history of arterial hypertension (p=0.006), greater mean disease duration (p=0.0007), hip circumference (p=0.014), blood pressure (SBP p=0.038, DBP p=0.027), HAQ levels (p=0.019) and hs-CRP levels (p=0.013), also lower mean height (p=0.04); while carotid plaques were related to higher homocysteine (p=0.026) and hs-CRP levels (p=0.024).

Conclusion: A considerable percentage of patients had subclinical atherosclerosis. Patients with CIMT>0.9mm had a longer disease duration, higher HAQ levels, hip circumference, as well as higher BP. High levels of hs-CRP were more frequently related to the presence of subclinical atherosclerosis.

References:

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THE RELATIONSHIP BETWEEN MICROVASCULAR DAMAGE AND DISEASE ACTIVITY IN PATIENT WITH RHEUMATOID ARTHRITIS – ASSESSMENT BY VIDEOCAPILAROSCOPY

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Background: Rheumatoid arthritis (RA) is an autoimmune disease characterized by erosive synovitis (causing severe joint damage) and systemic damage.
Rheumatoid vasculitis (RV) is an extra-articular manifestation of rare but serious rheumatoid disease that involves the damage of small and medium sized vessels.

Objectives: The purpose of the study was to evaluate the incidence of damages occurred on cutaneous level in patients diagnosed with RA and to detect capillaroscopic microangiopathy changes in the activity of rheumatoid disease.

Methods: 101 patients were included in the study, all were diagnosed with RA according to the ACR/EULAR 2010 criteria. RV diagnosis was based on the clinical examination. The capillaroscopic evaluation was performed with a 3.0 VideoCap device at a 200x magnification (200x magnification contact lense). Capillaroscopic examination was performed on fingers II-V of both hands, being considered pathological if the capillaroscopic changes are present in at least two fingers. The activity of disease was calculated using DAS 28 ESR score.

Results: 18% of examined patients was male and 82% female, with the mean age of 56.2±4.5 years, and the mean duration of disease in years of illness was 8.6±5.3 years. 3 patients had perungual vasculitis with cutaneous ulceration and gangrene, 12 patients had palpable purpura. 29% of the patients had vasospastic skin changes. The activity score of RA was associated with the capillaroscopic changes in peripheral microangiopathy p<0.037. Capillaries images were heterogenous in aspects and distribution, tortuous capillaries, microhemorhogages, giant/dilated capillaries, avascular area were observed.

Conclusion: Vascular microangiopathy evidenced by capillaroscopic examination is present in patients with cutaneous vasculitis having a medium, severe activity of rheumatoid diseases.

References:

SARCOПENIA AND RHEUMATOID ARTHRITIS

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Background: Nowadays in the field of syndromes and diseases associated with age, scientists focus especial attention on the problem of sarcopenia, which combines an increased risk of falls, deterioration of life quality, impaired functional activity, reduced life expectancy and increased mortality of patients. In 2016, sarcopenia has been included in the International Classification of Diseases. There are the primary and secondary forms of sarcopenia.

Objectives: The aim of this study was to evaluate the bone mineral density, lean mass, frequency of pre-sarcopenia and analyze correlation among the activity parameters, duration of the disease, life quality and lean mass indices in women with rheumatoid arthritis.

Methods: 461 women aged 40-87 years (age ≤ 57.17 ± 0.71 years) were examined, among them 71 patients with rheumatoid arthritis and 390 controls. We conducted the clinical and laboratory examination. Pain intensity was evaluated by the visual analogue scale, the quality of life – by the HAQ questionnaire. Lean mass, bone mineral density were measured by the X-ray absorptionmetry (Prodigy, GEHC Lunar, Madison, WI, USA). Pre-sarcopenia was determined when an appendicular lean mass index was less than 5.72/1kg/m² (V. Povoroznyuk, N. Dzerovych, 2016).

Results: Patients with rheumatoid arthritis had a significantly lower femoral neck mineral density (p = 0.002), lean mass of the total body (p = 0.01) and appendicular lean mass (p < 0.01). We didn’t find any significant connection among the activity parameters (C-reactive protein, ESR, pain VAS, DAS-28), duration of the disease, life quality and lean mass indices in patients with rheumatoid arthritis. However, a significant correlation was found between the number of swollen joints and lean mass of upper limbs (r = 0.67, p = 0.00). The frequency of pre-sarcopenia in women with rheumatoid arthritis was 49%, in the control group – 18%.

Conclusion: Patients with rheumatoid arthritis had not only bone tissue, but also skeletal muscle tissue disorders, resulting in a significant deterioration of functional capacity and quality of life. Given the significant medical and social significance of the problem, further studies into the mechanisms of pathogenesis, development of diagnostic methods, prevention and treatment of sarcopenia in patients with rheumatoid arthritis are required.

Disclosure of Interests: None declared

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AB0261 IMPACT OF COMORBIDITIES IN THE DISEASE ACTIVITY OF PATIENTS WITH SPONDYLOARTHRITIS AND RHEUMATOID ARTHRITIS: TUNISIAN REGISTRY (BINAR)

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Background: Comorbidities can be associated with rheumatoid arthritis (RA) and spondyloarthropathy (SpA). This association can be fortuitous but can also be secondary to rheumatism itself or to the effects of the treatments used. These comorbidities can worsen the disease and even increase patient mortality.

Objectives: To assess the prevalence of comorbidities in RA or SpA patients from the Tunisian Biologics National Registry (BINAR) and to focus on their influence on the disease activity.

Methods: BINAR is a multicenter non-interventional and prospective study, conducted in Tunisia with 80 rheumatologists over a period of three years. It included patients with RA (ACR / EULAR 2010 criteria) or SpA (ASAS 2009 criteria). Data were collected and analyzed through an electronic platform managed by DACIMA. They included demographic data, smoking status and types of comorbidities (cardiovascular disease, diabetes, dyslipidemia, osteoporosis, high blood pressure, neoplasia, gastrointestinal ulcer, depression and fibromyalgia). RA activity was evaluated by the DAS28-ES score and SpA activity by the BASDAI and ASDAS-ES scores.

Results: We included 298 patients (175 PR and 123 SpA) making the mean sex ratio 0.6 and mean age 49.18 ± 14.1 years. Mean BMI was 27.0 ± 5.5 kg / m² (15–45) and 17.7% of the patients were current or former smokers. Concerning disease activity, mean DAS28-ES in RA was at 4.9 ± 1.5 [1.1 - 8.1] and mean BASDAI and ASDAS-ES in SpA, respectively 4.1 ± 1.6 and 2.8 ± 1.1. Comorbidities were noted in 54% of patients (62% in SpA and 37% in RA), with an average of 1.7 comorbidities per patient.

The most common comorbidities were osteoporosis (38.8%), cardiovascular disease (20.1%), diabetes (16.8%), HBP (18.1%), dyslipidemia (6.7%) and GIU (0.6%). Depression, fibromyalgia and neoplasia were mentioned in 1.7%, 1% and 1%, respectively.

No correlation was found between the number of comorbidities and the activity level of RA: DAS28-ES (p = 0.12), nor the activity level of SpA: BASDAI(p = 0.07), ASDAS-ES(p = 0.15). Correlations were studied between each comorbidity and activity disease parameters of RA and SpA, they are specified in Table 1. We found that only the presence of osteoporosis was associated with SpA activity, (ASDAS-ES: p = 0.02).