Background: Poor adherence is one of the main causes of therapeutic failure in chronic inflammatory rheumatism, particularly in rheumatoid arthritis (RA). Thus to improve regular intake especially of conventional background treatments (cs-DMARDs), it is important to assess patients' beliefs and fears about their treatments.
Objectives: Evaluate the beliefs and fears of patients with Rheumatoid arthritis towards their conventional background treatments.
Methods: This is a cross-sectional study with RA follow-up patients meeting the ACR/EULAR criteria. Epidemiological, clinical and paraclinical data were collected. The evaluation of beliefs and fears towards csDMARDs was carried out by the BMQ score which has two five-item scales rated according to a 5-point Likert scale, ranging from 1 (not at all agree) to 5 (strongly agree). The scores of necessity, fear, overuse and nuisance were calculated. Patients were divided into 4 groups according to their beliefs of csDMARDs: accepting, ambivalent, indifferent and septic.
Results: The mean Disease Activity Score (DAS28crp) was 3.5 ±1.54, the mean value of Visual analogue scale of pain (VAS) was 40.5± 20.5, and the mean value of Health Assessment Questionnaire (HAQ) was 1.05± 0.85. All patients were treated with methotrexate and 12.5% with Salazopyrine in combination. The average need score was 20± 2.4, fear score was 16.45± 3, overuse score was 13.67± 2.25 and nuisance score was 10.8± 2.6. Patients' beliefs about the need for their background treatments were more important than their concerns and fears about the potential consequences of these treatments (p=0.03). A higher necessity score was correlated with the number of painful joints (NAD) (p=0.02) and a higher DAS28 (p=0.05). Patients who were more afraid of their treatments had more joint deformities (p=0.03), higher HAQ functional index (0.007) and a higher VAS value (p=0.01). The belief profile study concluded that 60% of patients were ambivalent, 27.5% accepting, 10% indifferent and 2.5% were septic towards their background treatments.
Conclusion: Our study showed that during RA, knowledge of the profiles of our patients, their beliefs and fears about their treatments especially cs-DMARDs is essential, and could help us to adapt strategies for improving compliance.
Disclosure of Interests: None declared
DOI: 10.1136/annrheumdis-2022-eular.1026

AB0250 DESCRIPTION OF ARTERIAL STIFFNESS, INFLAMMAGING AND VASCULAR AGE IN A GROUP OF PATIENTS WITH RHEUMATOID ARTHRITIS UNDER A STRICT FOLLOW-UP COMPARED WITH UNCONTROLLED OSTEOARTHRITIS PATIENTS

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Background: The risk of cardiovascular disease (CVD) in patients with rheumatoid arthritis (RA) is higher than in individuals in the general population. The fundamental risk factor for CVD is age, related to alterations at the arterial level, called vascular aging reflected by arterial stiffness and endothelial dysfunction
Objectives: The aim of the study was to compare vascular age and arterial stiffness (PWV-Pulse Wave Velocity) in two groups of patients with RA and with osteoarthritis (OA) and to assess the influence of inflammaging (persistent low-grade inflammation that develops with age) and metabolic markers in these outcomes.
Methods: Analytical cross-sectional study. RA patients under a strict follow-up program (T2T evaluated every two months) and OA patients without strict clinical follow-up, evaluated once or twice a year, were included. Patients with history of uncontrolled hypertension, CVD and/or current smoking were excluded. Waist-hip ratio, body mass index (BMI), DAS28 (RA), C-Reactive protein (CRP), Erythrocyte sedimentation rate (ESR), glycemia and lipid profile were measured. PWV and vascular age (in years) were evaluated through oscillometric method, arteriograph-TensioMed. Eleven proteins components of the inflammaging (cytokines, Matrix metalloproteinases - MMPs and its tissue inhibitors), were quantified through Luminex multiplex assay in serum samples. Univariate and bivariate analyzes (Chi-square and non-parametric correlations) were performed. Approval of Ethics Committee and informed consent were obtained.
Results: A total of 106 patients (74% women) were included (52/RA and 54/OA). Mean age was 57±5.6 years without differences between groups. There were significant differences in CRP and ESR (higher in RA) and in BMI, waist circumference and weight (higher in OA). RA patients had low disease activity level (DAS28: Median 2.6, IQR 1.3). There were no differences in PWV, vascular age or inflammaging (except for MMP-1, higher in RA), between the groups. PWV had a positive correlation with LDL (Rho Coef. 0.218 p=0.025). Patients who performed physical activity had a lower vascular age than those who did not [43 Interquartile range (IQR)23 vs 60 IQR 17, p=0.032). Vascular age was higher in RA patients who did not receive methotrexate 60 (IQR 19.3) compared with patients under methotrexate treatment 44.5 (IQR 23) (p = 0.017). Also, vascular age was lower in OA patients under prescribed physical activity (43 IQR 24.8 vs 56.5 IQR 20, p=0.03). MMP-9 in RA patients (Rho 0.283, p=0.042) and IL-10 in OA patients (Rho 0.290, p= 0.036) correlated with diastolic pressure. The components of inflammaging did not correlate with vascular age. The Framingham Risk Score was strongly associated with vascular age.

Table 1. Significant correlations with vascular age

Variable	Spearman's Rho	p-value
LDL levels	0.200	0.040
Systolic blood pressure	0.300	0.002
Mean arterial blood pressure	0.210	0.031
Daily coffee cups intake	-0.212	0. 045
Framingham Risk Score	0.340	<0.0001
MDHAQ score in RA patients	0.417	0.002

LDL: low density lipoprotein; MDHAQ: multidimensional health assessment questionnaire.

Conclusion: In RA strictly controlled patients, there are no differences in endothelial dysfunction, vascular age or inflammaging, when comparing with uncontrolled overweight OA patients. Physical activity, LDL levels and coffee consumption corelate with vascular age in OA and RA patients. OA patients under physiatrists follow-up and RA patients under methotrexate treatment or with low MDHAQ levels have lower vascular age levels.
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Disclosure of Interests: None declared
DOI: 10.1136/annrheumdis-2022-eular.1037

AB0251 * FATIGUE IN RHEUMATOID ARTHRITIS: DOES PATIENT AGE INFLUENCE?

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Background: Fatigue in RA has a multi-causal pathway. It is recommended that it should be measured in all RA studies using a validated instrument. Fatigue in elderly patients could have a different perception than in younger patients, identifying the associated factors could be a key to the management of this complex symptom.
Objectives: To compare fatigue and its associated factors in young and elderly patients with RA from two university hospitals.
Methods: A cross-sectional analysis was performed in 167 RA patients diagnosed according to the 2010 ACR-EULAR criteria. Patients were divided into two groups based on age (≥60 and <60) for comparative purposes. Fatigue was assessed using 4 instruments: the Bristol Rheumatoid Arthritis Fatigue Multidimensional Questionnaire (BRAF-MDQ), the fatigue subscale of the Short-form 36 survey (fatigue-SF36), the Visual Analogic scale of fatigue (VASf) and the Functional Assessment of chronic illness Therapy Fatigue Scale (FACIT-F). To compare the mean of fatigue between groups we used a T-Test.
To determine in each group of patients (young and elderly patients) the relationship between the 4 subscales of fatigue (assessed by BRAF-MDQ) and the other variables (DAS28, CPR, ESR, hemoglobin, vitamin D, HAQ, RAID [Rheumatoid Arthritis Impact of Disease], SF36, Hospital Anxiety and depression Scale [HAD] and Brief Pain Inventory) a Spearman correlation was performed. A value of $p < 0.05$ was accepted as statistically significant.
Results: A total of 167 patients were included, 81 (48.5%) young and 86 (51.5%) elderly patients. We found fatigue (using 4 instruments) has not significant differences in young and elderly patients (Table 1). In young and

elderly patients, physical, living, cognitive and emotional fatigue were correlated to RAID, SF36, HAD and pain but they were not associated to CRP, ESR, hemoglobin and vitamin D. In young patients, all dimensions of fatigue were associated with DAS28. Furthermore, in elderly patients we found a relationship between physical (p-value 0.044) and living fatigue (p-value 0.012) with DAS28, nevertheless cognitive and emotional fatigue (p-value 0.078 and 0.079 respectively) were not related.

Table 1. Scores of the Fatigue Questionnaires used to assess fatigue in young and elderly patients with RA.

	Young Mean (SD)	Elderly Mean (SD)	p-value
FACIT-F	36.5 (12.5)	35.9 (11.7)	0.2963
VAS-F	4.3 (2.8)	3.8 (2.8)	0.119
SF36-Fatigue	50.9 (23.9)	51.0 (21.9)	0.628
BRAF-MDQ			
Physical	9.2 (6.2)	8.5 (6.3)	0.4670
Living	5.3 (5.6)	4.2 (4.6)	0.1446
Cognitive	3.3 (3.8)	4.2 (4.6)	0.2932
Emotional	3.5 (3.5)	2.6 (2.7)	0.0932

Conclusion: In young and elderly patients, all dimensions of fatigue appear to be related with subjective but not with objective variables. In young patients, all dimensions of fatigue were associated with DAS28 but in elderly patients only physical and living fatigue were correlate to disease activity. These results could indicate that it is important to evaluate fatigue in a multidimensional perspective in elderly patients.

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Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2022-eular.1138

AB0252 INTOLERANCE TO METHOTREXATE IN RHEUMATOID ARTHRITIS: AN ASSESSMENT WITH THE MISS (METHOTREXATE INTOLERANCE SEVERITY SCORE)

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Background: Methotrexate (MTX) is a cornerstone in the treatment of rheumatoid arthritis (RA), in monotherapy or in combination with biological agents. Its prolonged use requires regular clinical and biological monitoring. The purpose of our study is to assess intolerance to MTX and its consequences.

Objectives: The purpose of our study is to assess intolerance to MTX and its consequences.

Methods: This is a cross-sectional study with RA follow-up patients meeting the ACR/EULAR 2010 criteria. An assessment of MTX intolerance was conducted using the Arabic version of the MISS (Methotrexate Intolerance Severity Score). It is a questionnaire containing 12 items covering four areas: abdominal pain, nausea, vomiting and behavioral disorders. A score of six indicates an intolerance.

Results: Forty patients were included: 35 women (87.5%) and 5 men (12.5%) of average age 51.7 years ±12.7 years. The average duration of disease progression was 12.2 years 9.2 [1-40 years]. All patients were treated with methotrexate and supplemented with folic acid. 50% of patients were under 10mg/week of MTX, 27.5% under 15mg/week and 22.5% under 20 mg/week. Patients had been on this treatment for an average of 8.7 years [1-25 years]. The majority of them (97.5%) received corticosteroids in combination, 12.5% received Salazopyrine and 27.5% received biotherapy. Methotrexate intolerance was observed in 16 patients (42.1%). Nausea was observed in 13 patients (81.2%), vomiting in 5 patients (31.2%), abdominal pain in 11 patients (68.8%) and behavioral disorders in all patients. As a result of this intolerance, 18.8% of patients had to stop their treatment, 12.5% decreased the dose on their own, 6.2% took the MTX irregularly, 12.5% switched from the oral route to the intramuscular route and 50% continued to take their treatment in the usual way. The study of correlations did not reveal statistically significant associations between MTX intolerance and age, sex, dose and duration of MTX, the associated intake of salazopyrin, biotherapy and other symptomatic treatments.

Conclusion: The occurrence of an intolerance to MTX is common in patients followed for RA, which may lead to poor adherence to therapy or even a discontinuation of treatment thus decreasing the effectiveness of management. Hence the need to systematically detect this intolerance and react in time.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2022-eular.1174

AB0253 CARDIOVASCULAR OUTCOMES IN PREVENTION RANDOMIZED CONTROLLED TRIALS IN PATIENTS WITH INFLAMMATORY ARTHRITIS: A SYSTEMATIC REVIEW.

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Background: Cardiovascular disease (CVD) risk in patients with chronic inflammatory arthritis (IA), including rheumatoid arthritis (RA), psoriatic arthritis (PsA) and ankylosing spondylitis (AS), is substantially increased compared to the general population. New evidence strengthens the notion that the excess risk of CVD morbidity and mortality in patients with IA is related to both traditional (e.g. hypertension, diabetes, smoking) and novel CVD risk factors, including chronic inflammation, leading to an accelerated atherosclerosis. How to minimize such increased CVD prevalence is still poorly understood, and whether more intensive traditional risk factor control or disease specific risk factor should be targeted is still matter of debate.

Objectives: The aim of this systematic review was to identify intervention targeting CVD or inflammatory arthritis associated with improvement of CV risk outcomes (estimated CV risk, CV events, endothelial function, arterial stiffness, subclinical atherosclerosis) in adult patients with diagnosis of inflammatory arthritis (RA, PsA and AS).

Methods: Two independent reviewers retrieved randomized controlled trials of interest from systematic searches of Medline, Embase and Cochrane database (20th April 2020). Data extraction was performed using standard template; the quality of each included trials was assessed with the Revised Cochrane risk-of-bias tool for randomized trials (RoB 2) [1]. Systematic review was conducted following the Preferred Reporting Items for systematic reviews and Meta-analysis (PRISMA) statement.

Results: Out of total of 4823 articles, 27 met the inclusion criteria. Among these, most (n=22) involved RA patients, one trial was based on mixed IAs patients and the remaining (n=4) were performed on spondylarthritis population. Total number of patients was 8045. Overall risk of bias was high in most of per protocol analysis trials (90%) and in 26.7% of intention-to-treat analysis trials. Four trials evaluated major adverse cardiovascular events (MACE) incidence and one of these demonstrated a significant reduction in incidence of MACE in RA patients underwent a treat-to-target strategy of CV risk factor. The same study also demonstrated a significant reduction in progression of subclinical atherosclerosis (carotid Intima-media thickness, cIMT), while other trials (n= 8) exploring effect of rosuvastatin, enalapril, tocilizumab and TNF-inhibitors failed to reach a similar result. Endothelial dysfunction, predominantly measured as reduce flow mediated dilatation (FMD), was widely used as surrogate outcome of CVD and it appeared to be significantly improved by treatment with statins, ACE-inhibitors, anakinra and tocilizumab. Treatment with pioglitazone, anakinra or tocilizumab in three trials significantly ameliorated arterial stiffness, estimated with pulse wave velocity (PWV), Cardio-ankle vascular index (CAVI) or augmentation index (AI). Two studies explored how a reduction of estimated CV risk could be achieved after treatment with enalapril and tight-control strategy aiming to SDAI ≤ 3.3. Results of both trials didn't demonstrate any variation in QRISK3-2018 and Framingham risk score, respectively.

Conclusion: Optimal CVD management in IA patients remains undefined and it should be implemented as stated in international guidelines. Randomized controlled trials exploring efficacy of prevention strategy are few and predominantly focused on surrogate outcome measures of cardiovascular risk.

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