months. Rheumatoid Factor (RF) positivity and higher baseline fatigue were associated with high symptoms at 6months; decreasing ESR from 6 to 12-months was associated high symptoms at 12months, and having high symptoms at 12-months, along with reduced Swollen Joint Count (SJC), CRP and MCS from month 12 to 18 was associated with high symptoms at 18-months.

Conclusion: Tight treatment control resulted in controlled Inflammation by 6-months, resulting in just two main patient sub-groups; those with low and high P&PS. Over one-third of patients experienced high pain and psychological symptoms. Membership of the high symptom group was associated with RF positivity but was mainly driven by prior symptom experience. Whilst inflammatory control remains a primary target, other treatments targeting pain, fatigue and mental health must be considered to reduce the burden of disease.

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SAT0080 COMPARISON OF INFLAMMATORY CYTOKINES LEVELS IN RHEUMATOID ARTHRITIS WITH CAROTID PLAQUE; CASE-CONTROL STUDY

Karla Paola Cuéllar-Calderón¹, Dionicio Ángel Galarza-Delgado¹, José Ramón Azpiri-López², Iris Jazmin Colunga-Pedraza², Ileana Cecilia Reynosa-Silva¹, Marielva Castro-González¹, Carolina Marlene Martínez-Flores², Raymundo Pineda¹, Gisela García-Arellano¹, Rosa Arvizú Rivera¹. ¹Hospital Universitario Dr José Eleuterio Gonzalez, Rheumatology, Monterrey, Mexico; ²Hospital Universitario Dr José Eleuterio Gonzalez, Cardiology, Monterrey, Mexico

Background: There is a 50% increase in cardiovascular mortality in RA compared to controls. Chronic inflammation causes endothelial dysfunction and accelerated atherosclerosis. Key molecular pathways in this process are dependent on cytokines like TNF- α , IL-1, IL-6, among others, which are shared with RA. Increased disease activity could contribute to atherosclerosis. Carotid ultrasound (US) has recently been recommended as a screening tool for early detection of subclinical atherosclerosis.

Objectives: To compare different cytokines between Mexican-mestizo RA-subjects with/without carotid plaque (CP).

Methods: An observational cross-sectional trial was designed. Inclusion criteria: age between 40-75 years old, fulfillment of the 2010 ACR/EULAR classification criteria, and detection of a CP during a carotid US. Subjects with a prior diagnosis of cardiovascular disease or a poor US window were excluded. RA subjects were matched to controls (RA patients without CP) by age and cardiovascular (CV) comorbidities. Every subject had a carotid US performed; reviewed by two board-certified radiologists. Cytokines measured were IL-1, IL-6, TNF- α , VCAM-1, ICAM-1 and MMP-9, using an ELISA reader (Glomax E9032). Descriptive analysis was done with frequencies (%), median (q25-q75), and comparisons between groups with Chi square test and Mann U Whitney's test.

Results: 71 subjects were included, 95.8% were females, with a median age of 58 years (54-65). Levels of cytokines in Table 1. Comparisons between groups are in Table 2. Groups were well balanced, with no differences in CV comorbidities ($p>0.05$). No significant differences among cytokine levels regarding CP were found. Subjects in remission ($n=12$, 33%) had a lower prevalence of CP ($p<0.05$, OR: 0.3; 95% CI: 0.1-0.9) and a lower median IL-1 level than those with higher disease activity ($p<0.05$). No significant differences were found among any other of the compared cytokines.

Table 1. Cytokines levels

	Median(q25-q75)
IL1, pg/ml	8.1 (6.6-9.6)
TNF- α , pg/ml	76 (61-101)
IL6, pg/ml	4.4 (4.1-4.8)
ICAM, ng/ml	91 (61-141)
VCAM, ng/ml	56.5 (41.3-65.1)
MMP9, pg/ml	811 (721-931)

Table 2. Clinical characteristics.

Variable	CP (n= 37)	No CP (n=34)	p
Age, years median (q25-q75)	59.2 (54.8-66.1)	57.7 (53-61.2)	NS
Female, n (%)	35 (94.6)	33 (97.1)	NS
Dyslipidemia, n (%)	7 (18.9)	6 (17.6)	NS
T2DM, n (%)	10 (27)	7 (20.6)	NS
Hypertension, n (%)	12 (32.4)	10 (29.4)	NS
BMI, median (q25-q75)	29 (26.5-31.1)	27.9 (24.6-33.2)	NS
Disease duration, media $\pm$ SD	12.4 $\pm$ 9.9	10.6 $\pm$ 9	NS
DAS28 CRP, median (q25-q75)	2.9(1.5-3.9)	2.39 (1.8-3.1)	NS
MTX n, (%)	17 (45.9)	22 (64.7)	NS
Prednisone, n (%)	27 (73)	24 (70.6)	NS
IL-1 pg/ml, median (q25-q75)	8.7 (6.7-10.1)	7.9 (6.1-9.3)	NS
TNF- α pg/ml, median (q25-q75)	76 (61-101)	76 (61-96)	NS
IL-6 pg/ml, median (q25-q75)	4.4 (4.1-4.9)	4.4 (3.9-4.8)	NS
ICAM ng/ml, median (q25-q75)	91 (61-118.5)	83.5 (61-217.2)	NS
VCAM ng/ml, median (q25-q75)	58.1 (42.1-64.8)	54.3 (35.1-65.9)	NS
MMP9 pg/ml, median (q25-q75)	811 (711-938.5)	821 (724.7-931)	NS
Remission (DAS 28-CRP<2.6), n (%)	12 (33.3)	20 (58.8)	0.032

Conclusion: In our cohort subjects in remission had a lower prevalence of CP (OR= 0.3, 0.1-0.9). No difference was found between cytokines regarding CP. Subjects with active disease had a higher level of IL-1 than subjects in remission. To our best knowledge, this is the first study to evaluate levels of cytokines in Mexican RA-subjects.

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SAT0081 BOTH OVERFAT AND MYOPENIA ARE ASSOCIATED WITH PHYSICAL DYSFUNCTION IN RHEUMATOID ARTHRITIS PATIENTS

Chutao Chen, Jian-Zi Lin, Lijuan Yang, Li Qian-Hua, MA Jianda, Le-Feng Chen, Yingqian Mo, Lie Dai. Sun Yat-sen Memorial Hospital, Sun Yat-sen University, Department of Rheumatology, Guangzhou, China

Background: Comprehensive disease control has been recommended by EULAR guidelines for rheumatoid arthritis (RA) which includes simultaneous achievement of stringent control of the signs and symptoms of inflammation, the absence of radiographic progression and normal physical function. Identifying those patients at high risk of disability at a sufficiently early stage of their disease course presents a major challenge. The associations of body mass index (BMI) and body composition (BC) with physical activity function in RA patients still obscure.

Objectives: To investigate the characteristics of BC and BMI in RA patients and their association with physical activity function.

Methods: Consecutive RA patients were recruited and clinical data including disease activity, function and radiographic assessment were collected. BC was assessed by bioelectric impedance analysis. Overfat was defined by body fat percentage (BF%) as $\geq 25\%$ for men and $\geq 35\%$ for women. Myopenia was defined by appendicular skeletal muscle mass index (ASMI) $\leq 7.0\text{kg/m}^2$ in men and $\leq 5.7\text{kg/m}^2$ in women. Subjects were categorized by BMI as underweight ($\text{BMI}<18.5\text{ kg/m}^2$), normal weight ($18.5\text{ kg/m}^2\leq\text{BMI}<24\text{ kg/m}^2$), overweight ($24\text{ kg/m}^2\leq\text{BMI}<28\text{ kg/m}^2$) and obese ($\text{BMI}\geq 28\text{ kg/m}^2$) according to Chinese criteria. Physical dysfunction was defined by HAQ-DI ≥ 0.5 .

Results: There were 516 RA patients (mean age 49.8 ± 12.9 years old with 83% women) recruited, and 37% with physical dysfunction. Compared with those with normal physical function, RA patients with physical dysfunction