of ejection fraction values obtained by conventional methods, may be a guide for the clinician in early detection of cardiac dysfunction in RA patients with high DAS-28 score, long disease duration, high Anti-CCP and high RF titers.

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FRI0059 SARCOPENIA IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Sarcopenia is defined as the decrease in strength, mass and function of muscles and may be related with aging, chronic inflammation or malnutrition. Proinflammatory cytokines may be associated with development of sarcopenia.

Objectives: The aim of this study was to evaluate sarcopenia in patients with Rheumatoid Arthritis (RA).

Methods: One hundred patients with RA (30 Male/70 Female) and 100 healthy controls (30 Male/70 Female) were included in this cross sectional study. According to The European Working Group on Sarcopenia in Older People (EWGSOP2) 2018, three parameters; muscle strength, muscle mass and physical performance, which are evaluated by hand grip strength, Body Impedance Analyzer (BIA) and 6 meters gait speed test, respectively, are used to diagnose sarcopenia. Patients with arthritis in dominant hand joints and ankle joints were excluded. Sarcopenia is defined as the decrease of strength and mass of muscles. On the other hand patients with low muscle strength but normal muscle mass are defined as probable sarcopenia.

Results: The mean age was 58.52±10.95 for patients and 56.62±10.08 for controls (p=0.203). Frequency of probable sarcopenia was 35 (35.0%) in RA and 9 (9.0%) in control group (p<0.001). Results of hand grip and 6 meters gait speed tests were lower in RA patients (p=0.002 and p<0.001 respectively). Frequency of probable sarcopenia was higher in females, older patients and patients with longer disease duration. Disease activity and Health Assessment Questionnaire scores were higher in patients with probable sarcopenia compared with patients with no sarcopenia (p<0.05) (Table 1). In multivariate regression analysis; age, gender and DAS28 ESR/CRP were associated with hand grip strength (p<0.001, R²=0.62) (Table 2).

Table 1. Factors associated with sarcopenia in rheumatoid arthritis

Rheumatoid arthritis group	No sarcopenia (n=65)	Probable Sarcopenia (n=35)	p-value
Sex, n (%)			
Male	24 (36.9)	6 (17.1)	0.04^a
Female	41 (63.1)	29 (82.9)	
Age*	55.00 (25.00–82.00)	63.00 (24.00–82.00)	0.004^b
Disease duration (year)*	4.00 (1.00–37.00)	8.00 (1.00–41.00)	0.037^b
DAS28 CRP*	2.13 (1.08–4.69)	2.55 (1.54–5.56)	0.010^b
DAS28 ESR (mean±SD)	2.63±0.94	3.36±1.00	<0.001^c
CDAI*	5 (0–25)	9 (0–29)	0.012^b
SDAI*	5.09 (0.04–26.04)	9.8 (0.39–31.7)	0.006^b
HAQ*	0.15 (0–1.05)	0.4 (0–19.5)	<0.001^b

^aPearson Chi-Square, ^bMann-Whitney U Test, ^cIndependent Samples T-Test. *Variables given as median (minimum-maximum) DAS: Disease activity score ESR:Erythrocyte sedimentation rate, CRP:C-reactive protein, CDAI: Clinical Disease Activity Index, SDAI: Simplified Disease Activity Index, HAQ: Health Assessmentnet Questionnaire

Table 2. Multivariate analysis for hand grip test in patients with rheumatoid arthritis

	Unstandardized Coefficients		95% CI		Standardized Coefficients	p-value
	B	Std. Error	Lower	Upper	Beta	
Constant	53.65	3.89	45.93	61.37	–	<0.001
Gender	–13.06	1.41	–15.86	–10.26	–0.60	<0.001
DAS28 CRP	–3.21	0.70	–4.61	–1.82	–0.29	<0.001
Age	–0.22	0.06	–0.33	–0.10	–0.23	<0.001

DAS: Disease activity score CRP:C-reactive protein

Conclusion: Loss of muscle strength in patients with RA may be seen frequently. Longer disease duration and higher disease activity should lead to development of sarcopenia due to chronic inflammation. Sarcopenia potentially affects patients' social lives and daily functions and conceive decrease quality of life. Physicians should be aware of development of sarcopenia during the course of the disease, and take into account the preservative and preventive methods against to sarcopenia including exercise and control of disease activity.

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FRI0060 EVALUATION OF THE CARDIOVASCULAR RISK IN WOMEN WITH RHEUMATOID ARTHRITIS WITH DUPLEX STUDY OF THE CAROTID AND FEMORAL ARTERIES

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Background: The increasing of the cardiovascular disease (CVD) in patients with rheumatoid arthritis (RA) is well know, even with the absence of traditional coronary risk factors. The ultrasound – duplex scan (USD) is a non invasive technique able to early detect atherosclerotic changes in the blood vessel, that gives the possibly to retard the development of symptomatic CVD.

Objectives: To evaluate the cardiovascular (CVS) risk in patients with RA classified as low risk by Framingham Score (FS), before and after the EULAR 1.5 multiplication factor and stratify with the carotid and femoral USD (intima-media thickness - IMT and atherosclerotic plaques - AP)

Methods: Thirty-five female patients with RA and low CVS risk by FS and 35 healthy women with low CVS risk by FS (control group) were enrolled for the study. All of them submitted to carotid and femoral USD

Results: The groups were homogenous by age and CVS comorbidities -Table 1. Mean age in the diagnosis was 44.57 years, mean disease duration was 12.11 years and mean disease activity was Disease Activity Score 28: 1.91 and Clinical Disease Activity Score: 6.176. In the RA patients group 46% showed changes in the carotid and/or femoral USD compared with 14% of the control group (p = 0.004) –Graphic 1. The USD with abnormalities in RA group 31% of the carotid USD and 81% of the femoral USD (p= 0.005) showed IMT and/or AP. After EULAR 1.5 multiplication factor, 66% remained low CVS risk. Where 35% of the RA patients showed changes in the carotid and/or femoral USD compared with 14% of the control group (p=0.07)

Conclusion: The USD is able to early detect the CVD, special attention should be given to the femoral arteries, that are frequently affected. The Eular criteria is also effective and should be used in the clinical practice

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