The mean age±SD was 57.1±16.1 years. The mean evolution of RA was 9±5.8 years. The patients had previously received the following DMARDs; MTX (n=12), leflunomide (LFN) (8) sulfasalazine (SSZ) (3) hydroxichloroquine (HCQ) (1) azathioprine (AZA) (2), gold salts (2). In addition, 11 patients had previously received biological drugs: adalimumab (4) anakinra: (1), etarnecept (4), rituximab (4), infliximab (1), certolizumab (1), abatacept (1). RA was seropositive in 11 cases (92%). Besides HRCT, the diagnosis of ILD was confirmed by biopsy in 4 patients. In 2 patients ILD was drug-related: MTX (n=2). TCZ was prescribed in monotherapy (n=8) or combined with other DMARDs (4). These DMARDs were: LFN (2), MTX (1), AZA (1). In many patients the dyspnea and DLCO remain stable (Table). After a follow-up of 12 months, 2 patients withdrew TCZ, 1 patient for ILD worsening and 1 patient for joint inefficacy.

Table 1

	Baseline	3th month	6 th month	12th month
MRC, n (%)		11	8	11
– No change		11 (100)	7 (87)	8 (73)
– Improvement		0	0	2 (18)
– Worsening		0	1 (13)	1 (9)
FCV, n (%)		2	5	9
– No change		2 (100)	5 (100)	6 (67)
– Improvement		0	0	2 (23)
– Worsening		0	0	1 (12)
DLCO, n (%)		2	4	9
– No change		1 (50)	3 (75)	9 (100)
– Improvement		0	0	0
– Worsening		1 (50)	1 (25)	0
HRTC, n (%)		0	2	10
– No change		1 (50)	7 (70)	
– Improvement		0	0	
- Worsening		1 (50)	3 (30)	
DAS28 – *mean*	4.46±1.40	3.35±1.19	3.23±1.04	2.98±0.95
CRP (mg/dl) – *-mean*	3.23±2.96	1.11±0.98	1.48±0.95	1.15±0.84
ESR (mm/1st h) – *mean*	45.17±28.84	16.16±10	16.16±11.41	17.47±25.45

Conclusions: In our knowledge, this is the largest series that assess the EPID associated with RA treated with TCZ. We observed that in many cases pulmonary involvement remains stable.

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THU0135 THE COURSE OF LOWER EXTREMITY FUNCTION IN PATIENTS WITH EARLY RHEUMATOID ARTHRITIS OVER THE FIRST FIVE YEARS

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Background: Rheumatoid arthritis (RA) frequently involves joints of the feet and the knees. Disability related to arthritis in the lower extremities has a major impact in many patients, but has not been extensively studied.

Objectives: To investigate lower extremity function in early RA, using validated tests, and to assess its relation to other disease parameters.

Methods: Consecutive patients with early RA (symptom duration ≤12 months) in an inception cohort from a well-defined area were followed according to a structured protocol, with visits at inclusion and after 1, 2 and 5 years. Lower extremity function was investigated using the Index of Muscle Function (IMF) (1), a validated battery of tests by which the patient's general ability, muscle strength, muscular endurance and balance/coordination are assessed by a physiotherapist. The scores on the subscales are added for a total IMF score (IMF total) of 0–40. A subscore of the Health Assessment Questionnaire Disability Index (HAQ-DI), based on the 10 questions that are mainly dependent on function of the lower extremities (the HAQ-DI-LE (2)) was calculated, as well as a modified HAQ-DI-LE (mHAQ-DI-LE) that included only the three HAQ-DI domains in which all questions relate mainly to the lower extremities. Changes in the IMF total score and subtest scores between visits were analyzed using the Wilcoxon signed rank test. Correlations between disease parameters were assessed using Spearman's rank test.

Results: A total of 106 patients (67% women, mean age 61 years, mean baseline DAS28 4.4, median baseline HAQ-DI 0.75) were included. Data on IMF total were available for 100, 89 and 67 patients at the 1, 2 and 5-year visits. Lower extremity function improved from baseline to the 1-year visit (IMF total median 10; interquartile range (IQR) 4–16 vs. 7; IQR 3–12) (p=0.01). This was followed by a decline in lower extremity function, in particular between the 2-year and 5-year visits (IMF total median 8 (IQR 3–13) vs 9.5 (IQR 3.75–18.25); p=0.001). This was mainly due to worsening in test results for muscle strength (median 4 (IQR 1–6) vs 5 (IQR 2–9); p=0.001) and for balance/coordination (median 2 (IQR 0–4) vs 3 (IQR 2–6); p=0.001). At baseline, IMF total correlated with HAQ-DI-LE (r=0.46), mHAQ-DI-LE (r=0.49) and HAQ-DI (r=0.40) (all p<0.001), whereas there were weaker correlations with CRP (r=0.24; p=0.02) and DAS28 (r=0.28; p=0.004). There were consistent correlations between IMF total and HAQ-DI-LE, mHAQ-DI-LE and HAQ-DI at all time points, but no significant correlations for IMF total with CRP and DAS28 at the 2-year visit.

Conclusions: In early RA, there was improvement in lower extremity function during the first year, followed by a gradual decline, possibly explained by lack of complete disease control and aging. Tests of muscular function in the lower extremities may reveal aspects of RA disease severity that are not fully captured by standard disease activity measures, and may add important information regarding functional loss.

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THU0136 NESFATIN-1 EXPRESSION IS ASSOCIATED WITH REDUCED ATHEROSCLEROTIC DISEASE RISK IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Nesfatin-1 comprises a peptide that is involved in appetite suppression, energy homeostasis and fluid regulation, and was recently documented to participate in a range of cardiometabolic pathways (1,2). There is currently a need for the identification of novel biomarkers in the elucidation of CVD risk and its stratification in persons with rheumatoid arthritis (RA). The role of nesfatin-1 in cardiovascular disease risk among RA patients is uncertain.

Objectives: We investigated the potential impact of nesfatin-1 on subclinical cardiovascular disease manifestations in patients with RA by determining the associations of nesfatin-1 concentrations with atherosclerosis and circulating levels of matrix metalloproteinase (MMP)-2 that mediates plaque stability and those of MMP-3 and MMP-9 that cause plaque vulnerability.

Methods: Nesfatin-1 concentrations were measured in 236 (114 black; 122 white) RA patients. Relationships of nesfatin-1 concentrations with ultrasound determined carotid intima-media thickness (cIMT) and plaque and MMP levels were identified in confounder adjusted multivariate regression models.

Results: Nesfatin-1 concentrations were inversely associated with c-IMT (β (SE) = -0.022 (0.008), p=0.00) and directly with MMP-2 levels (β (SE) =0.117 (0.031), p=0.00). After adjustment for conventional risk factors and RA characteristics, these associations persisted (c-IMT: β (SE) = -0.017 (0.008), p=0.04; MMP-2: β (SE) =0.116 (0.033), p=0.00). Patient characteristics did not influence the nesfatin-1-to-cIMT relation (interaction p≥0.7). By contrast, the Disease Activity Score in 28 joints (DAS28) and Clinical Disease Activity Index impacted the nesfatin-1-to-cIMT association (interaction p=0.04 and 0.02, respectively). Nevertheless, in stratified analysis, nesfatin-1 concentrations were related to those of MMP-2 in patients with no or mild (β (SE) =0.148 (0.054), p=0.00) and moderate or high disease activity (β (SE) =0.086 (0.041), p=0.04) as determined by DAS28 (cut-off value 3.6) as well as by CDAI (cut-off value =10) (β (SE) =0.130 (0.048), p=0.00 and 0.107 (0.046), p=0.02), respectively).

Conclusions: Nesfatin-1 concentrations are consistently associated with a reduced atherosclerosis burden and increased MMP-2 levels in patients with RA.

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THU0137 IMPACT OF PERIODONTAL AND RHEUMATIC DISEASE MARKERS ON FIRST-DEGREE RELATIVES OF PATIENTS WITH RHEUMATOID ARTHRITIS ACCORDING TO AGE GROUP

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Background: Rheumatoid arthritis (RA) and periodontal disease (PD) have