Table 1. Joint involvement associated with average grip force (% of expected value), multivariate linear regression

<table>
<thead>
<tr>
<th>Joint</th>
<th>Unstandardized β</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right hand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swollen Wrist</td>
<td>-1.10</td>
<td>-1.75 to -0.45</td>
</tr>
<tr>
<td>Tender MCP IV</td>
<td>-15.6</td>
<td>-25.2 to -6.0</td>
</tr>
<tr>
<td>Tender PIP IV</td>
<td>-2.3</td>
<td>-12.0 to 7.4</td>
</tr>
<tr>
<td>Tender Elbow</td>
<td>-11.7</td>
<td>-22.1 to -1.3</td>
</tr>
<tr>
<td>Left hand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swollen Wrist</td>
<td>-14.3</td>
<td>-20.4 to -7.6</td>
</tr>
<tr>
<td>Swollen MCP I</td>
<td>-7.6</td>
<td>-14.6 to -0.6</td>
</tr>
<tr>
<td>Swollen MCP V</td>
<td>-11.7</td>
<td>-21.9 to -1.5</td>
</tr>
<tr>
<td>Swollen PIP</td>
<td>-0.8</td>
<td>-9.2 to 7.5</td>
</tr>
</tbody>
</table>

MCP: Metacarpal phalangeal joint
PIP: Proximal interphalangeal joint

Conclusion: Involvement of several joint areas in the upper extremity contributes to impaired hand function. Clinical synovitis of the wrist was associated with reduced grip force in both hands. In the left hand, arthritis of the thumb had a major impact on grip force. In general, MCP involvement was found to be more important for the grip than PIP involvement.

REFERENCES:

POS0558 STATE OF ADIPOCYTOKINES IN PATIENTS WITH RHEUMATOID ARTHRITIS WITH SUBCLINICAL ATHEROSCLEROSIS
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Background: The causes of accelerated atherosclerosis in rheumatoid arthritis (RA) are not completely understood [1]. Therefore, there is a need to identify new biomarkers of increased cardiovascular risk in RA.

Objectives: To establish the relationship of adipokines (adiponectin and leptin) with metabolic and inflammatory markers of subclinical atherosclerosis in RA patients.

Methods: The study included 88 women with RA according to the ACR (American College of Rheumatology/EULAR (European League Against Rheumatism) criteria, 2010 [2] who visited the adaptation therapy clinic of Orenburg State Medical University. The mean±SD age was 46.4±8.5 years and the mean±SD disease duration was 8.2±5.6 years. We evaluated the following laboratory parameters in all patients: erythrocyte sedimentation rate (ESR), total cholesterol, triglycerides (TAG), high-density lipoproteins (HDL), low-density lipoproteins (LDL) and C-reactive protein (CRP). Serum concentrations of adiponectin, leptin, tumour necrosis factor γ (TNF-γ), and interleukin-17 (IL-17) were determined by enzyme-linked immunosorbent assay (ELISA).

Results: The serum adiponectin level was significantly higher in RA patients compared to the control group (p<0.001); 40.8±13.6 ng/mL versus 22.7±11.2 ng/mL. The level of leptin in the blood serum of women with RA and healthy individuals was approximately the same and amounted to 18.0±14.0 ng/mL.

Conclusion: In RA patients the predominance of concentrations of both adipokines in patients with paraclinical atherosclerosis were noted. The adiponectin concentration was 46.0±14.4 ng/mL versus 35.7±10.5 ng/mL (p<0.001). The leptin level was 26.4±20.6 ng/mL versus 14.9±6.2 ng/mL (p<0.01).

POS0559 SPECKLE TRACKING BETTER DETECTS SUBCLINICAL MYOCARDIAL DYSFUNCTION IN PATIENTS WITH RHEUMATOID ARTHRITIS
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Background: The risk of developing cardiovascular complications and death in rheumatoid arthritis (RA) is 50% higher than in the total population. These clinical events depend from risk factors for cardiovascular diseases, chronic inflammation and inflammatory myocardial infarction. A new method for detecting early myocardial dysfunction is echocardiography using speckle tracking echocardiography.

Objectives: To determine the frequency of myocardial dysfunction (lower global longitudinal epicardial strain of left ventricle (LV), diastolic dysfunction of left ventricle (LVD) using standard and novel echocardiographic methods in patients (pts) with RA prior to therapy with bDMARDs, examine its relationship with markers of inflammation.

Methods: a total of 28 pts with a valid diagnosis of RA (ACR/EULAR, 2010); 23 f (82%) / 5 m (18%) were included, median (Me) age - 56 [interquartile range (IR) 34;65] years, Me RA duration-14.5 [IR 7.8;7 months]; all pts with RA demonstrated a high disease activity (Me DAS28 6.06, [IR 5.4;6,6]), seropositive for IgM RF (88%) and/or ACCP (84%) without any experience of administration of bDMARDs. The control group consisted of 10 healthy subjects, which were matched by sex and age. All pts were assessed for traditional risk factors for cardiovascular disease (ESC guidelines, 2011), echocardiography, tissue Doppler imaging, and the speckle tracking assessment of left ventricular longitudinal strain.

Results: In pts with RA LVDD was more often detected (61 %) vs 0%, (p<0.05) than in controls. The values of E LV (0.77 [0.62;0.94] ms vs 1.25 [1.03;1.51] ms, p=0.0001) were lower than in control group. Speckle-tracking method detected lower global longitudinal epicardial strain (−16.5 [-18.9; -13.6])% vs −21.5 [-22.1; -20.4] %, p<0.001; 17(61%) RA pts showed a decrease global longitudinal epicardial strain. There were no between-group differences in left ventricular ejection fraction, LV sizes, LV myocardial mass index in RA pts with controls. There were correlations between the global longitudinal epicardial strain and DAS28 (r=0.9, p<0.02), tender joint score (r=0.6, p<0.02), radiological stage (r=0.6, p=0.008), the presence of systemic manifestations (r=0.5, p<0.03).

Conclusion: In pts with RA frequency (61%) were detected lower global longitudinal epicardial strain, which is associated with a high activity of the inflammatory process. Speckle-tracking echocardiography is better at detecting early myocardial dysfunction than tissue Doppler.

Disclosure of Interests: None declared
DOI: 10.1136/annrheumdis-2021-eular.2870

POS0560 CO-MORBIDITIES MAY NOT CHANGE TREATMENT CHARACTERISTICS OF THE RHEUMATOID ARTHRITIS PATIENTS
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Background: Several co-morbidities may usually accompany rheumatoid arthritis (RA)(1). These can have direct or indirect implications for the severity of rheumatoid arthritis, the doctors’ decision of change-disease modifying treatment, and the functional disability of patients.

Objectives: It has been previously shown that various co-morbidities can have negative effects on the functional status, quality of life and life expectancy of RA patients individually (2). Here, we evaluated the effect of weight of all co-morbidities on treatment of RA patients and functional disability. Our hypothesis “The functional status of RA patients with moderate and severe co-morbidities is impaired compared to patients with mild co-morbidities, and the treatment characteristics of RA are different between these groups.”

Disclosure of Interests: None declared
DOI: 10.1136/annrheumdis-2021-eular.2870