FR00650
ARE OLDER RA PATIENTS FRAIL, OR LONELY AND DEPRESSED?
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Background: The average rheumatoid arthritis (RA) patient has approximately 2 comorbidities, and this number increases with age. Both comorbidity and ageing are considered risk factors for frailty, a physiological syndrome characterised by reduced functional reserves and resistance to ‘stressors’ due to a cumulative decline of physiological and psychosocial systems. Frailty results in adverse health outcomes including hospitalisation and increased risk of mortality. The extent to which frailty is a relevant problem in elderly RA patients remains unknown.

Objectives: (1) To assess the prevalence of frailty and (2) to identify which factors are associated with frailty in elderly patients with RA.

Methods: Consecutive patients of the outpatient clinic where invited to participate in a study on ageing while ensuring equal representation of patients in three pre-defined age groups: 55–64, 65–74, and >75 years. Rheumatologists recorded the number of comorbidities. Patients rated their overall health on a visual analogue scale (0–100; 100 very bad health) and completed the validated Groningen Frailty Indicator (GFI), which contains 15 questions on the loss of functions and resources across 4 domains: physical (mobility functions, multiple health problems, physical fatigue, vision, hearing), cognitive (cognitive dysfunction), social (emotional isolation), and psychological (depressed mood and feelings of anxiety). Scores on items are dichotomized, “1”; indicating a problem or dependency. Prevalence of problems/dependency was compared among the 3 age-groups using a Kruskal-Wallis test. Characteristics of patients classified as frail (GFI score ≥4) or non-frail (GFI score <4) were compared using a chi-square test for categorical data or the independent samples t-test for continuous data.

Results: The prevalence of frailty across age groups was respectively 43.3%, 40.0% and 43.4%. Frail RA patients were more often female, had a lower subjective health status. Remarkable, patients classified as frail identified problems in the social and psychosocial domains. Of interest, there were no differences regarding age, polypharmacy, number of comorbidities, and cognitive domain (figure 1).

Table 1 Comparison of demographics, clinical characteristics, and number of patients with problems/dependency per frailty domain between frail and non-frail elderly rheumatoid arthritis patients.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frail (n=58)</th>
<th>Non-frail (n=22)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (mean [SD])</td>
<td>71.4 (6.1)</td>
<td>70.3 (6.9)</td>
<td>0.007</td>
</tr>
<tr>
<td>Sex</td>
<td>26 (45.1%)</td>
<td>18 (81.8%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Comorbidities (mean [SD])</td>
<td>4.1 (1.9)</td>
<td>3.8 (1.7)</td>
<td>0.008</td>
</tr>
<tr>
<td>Frailty Domain Scores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical domain GFI score</td>
<td>2.50 (1.30)</td>
<td>1.50 (0.80)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Mental domain GFI score</td>
<td>2.50 (1.30)</td>
<td>1.50 (0.80)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Social domain GFI score</td>
<td>2.50 (1.30)</td>
<td>1.50 (0.80)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Psychological domain GFI score</td>
<td>2.50 (1.30)</td>
<td>1.50 (0.80)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Conclusions: Using validated questionnaires, frailty is highly prevalent in all RA patients older than 55 years and seems to be a distinctive health construct which is not necessarily related to increasing age, polypharmacy and comorbidity in patients with RA. An alternative explanation of our findings is that rheumatologists seem to miss symptoms of depression and loneliness among RA patients.

Disclosure of Interest: None declared

FR00651
CARDIOVASCULAR RISK FACTOR AND DISEASE BURDEN IN BELGIAN PATIENTS WITH RHEUMATIC AND MUSCULOSKELETAL DISEASES OF NORTH AFRICAN COMPARED TO EUROPEAN DESCENT
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Background: Patients with rheumatic and musculoskeletal diseases (RMDs) from developed populations often experience increased atherosclerotic cardiovascular disease (ACVD) risk. In European countries, increasing proportions of inhabitants originate in developing countries and are therefore reported at an earlier epidemiological transition stage, which is associated with reduced ACVD.

Objectives: This study aimed to determine whether population origin specific cardiovascular risk factors included in the Systematic Coronary Risk Evaluation (SCORE) or/and Framingham score equation, other conventional and non-conventional cardiovascular risk factor profiles and the prevalence of subclinical ACVD comprising arterial stiffness (pulse pressure >60 mmHg) and established ACVD (coronary artery disease, ischaemic cerebrovascular disease or/and peripheral artery disease) in 673 consecutive patients with RMDs; 126 and 547 were of North-African and European ancestry, respectively. Cardiovascular risk factors and disease were compared between patients of North-African and European descent in multivariable logistic and linear regression models.

Results: Patients of North African descent tended to have less frequently inflammatory RMDs (OR (95% CI)=0.69 (0.45–1.04)) including rheumatoid arthritis (RA) (OR (95% CI)=0.46 (0.19–1.09)), and had more often fibromyalgia (OR (95% CI)=2.93 (1.84–4.65)). Patients of North African descent were younger than their European descent counterparts (mean (SD)=47.5 (14.7) vs 55.7 (16.5) years, p=0.0001). In age, sex and inflammatory RMD adjusted analysis, North African descent patients had less prevalent hypertension (OR (95% CI)=0.54 (0.33–0.87)) and more frequent diabetes (OR (95% CI)=3.69 (2.00–6.80)); North African descent patients exercised (OR (95% CI)=0.34 (0.20–0.57)) and used alcohol (OR (95% CI)=0.05 (0.02–0.12) less often, and had a less frequent family history of ACVD (OR (95% CI)=0.64 (0.41–0.99)), smaller body height (mean (SD)=1.84 (0.09) vs 1.68 (0.11) m, p<0.0001) and larger the Arthritis Impact Measurement Scales Depression score (mean (SD)=1.64 (0.9) vs 3.7 (2.0), p<0.0001). These findings translated into a frequencies of having ≥1 major cardiovascular risk factor, overall 10 year high risk for any (Framingham score ≥20) and fatal ACVD, and prevalence of subclinical and established ACVD that were as large in RMD patients from North African compared to European descent. European League Against Rheumatism multiplier2 application in patients with RA could alter these findings.

Conclusions: Consistent disparities exist in ACVD risk factor profiles between RMD patients of North-African and European descent. However, the overall cardiovascular risk factor and disease burden is currently as large in RMD patients of North-African and European descent. Adequate ACVD risk management is indicated in Belgian patients with RMDs.

Disclosure of Interest: None declared

FR00662
CORTICOSTEROID INJECTION FOR PLANAR HEEL PAIN: A SYSTEMATIC REVIEW AND META-ANALYSIS
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Background: Plantar heel pain is one of the most common conditions affecting the foot in adults, with prevalence estimates between 4% and 7%.1,2 Corticosteroid injection is a common intervention used to treat plantar heel pain,3 however there is limited high quality evidence to support this practise. Because corticosteroid injection is frequently used for plantar heel pain, it is important that health professionals understand whether the evidence-base supports the use of this intervention.

REFERENCES:

Disclosure of Interest: None declared
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RAPAMYCIN INDUCES REMISSION IN PATIENTS WITH REFRACTORY RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis (RA) is a chronic inflammatory disease that has a significant impact on the quality of life of patients. The etiology of RA is multifactorial, involving genetic, immunological, and environmental factors. There is a strong evidence that RA is an autoimmune disease with increased Th17 and decreased regulatory T cell (Treg) frequencies. The goal of this study was to investigate the effect of rapamycin on the number of peripheral T cell subsets in patients with refractory RA.

Objectives: To determine the frequency of peripheral T cell subsets in patients with refractory RA treated with rapamycin, and to explore the potential mechanisms of action of rapamycin in RA patients.

Methods: Patients with refractory RA were enrolled in this study. Blood samples were collected from patients before and after 24 weeks of rapamycin treatment. The peripheral T cell subsets were analyzed by flow cytometry.

Results: A total of 37 patients were included in the study. The number of peripheral Treg cells was significantly increased from 27.14±15.11 cells/μl at baseline to 36.59±17.23 cells/μl at week 24 (P<0.001). The ratio of Th17/Treg cells was also significantly decreased from 0.36±0.29 at baseline to 0.27±0.20 at week 24 (P<0.041). In contrast, the decrease in the absolute number of Th17 cells was not statistically significant (P=0.846). After the treatment, the proportion of patients taking glucocorticoids decreased from 66.0% to 64.0% and the mean dosage of prednisone decreased from 8.89 mg/d to 7.70 mg/d. And the usage of DMARDs were also reduced (P<0.001).

Conclusions: Rapamycin combined with low level of conventional therapy effectively reduced disease activity and induced remission among RA patients who received long-term conventional treatment without remission (DAS28 ≥ 2.6) by increasing the absolute number of Treg cells and restoring the balance of Th17 and Treg cells. As the research progresses, rapamycin is likely to become a promising therapeutic candidate.

REFERENCE:

Disclosure of Interest: None declared

FR0064

RIGHT VENTRICULAR DIASTOLIC DYSFUNCTION IN EARLY RHEUMATOID ARTHRITIS PATIENTS: RISK FACTORS AND THE EFFECT OF ANTIRHEUMATIC THERAPY


Objectives: To determine the frequency of diastolic dysfunction of the right ventricle (RVDD) in patients (pts) with early rheumatoid arthritis (RA) prior to therapy with basic anti-inflammatory drugs (DMARDs), examine its relationship with traditional risk factors of cardiovascular disease and markers of inflammation, to study the effect of antirheumatic therapy administered in accordance with “treat to target” (T2T) principles on RVDD in early RA pts during 18 month follow-up.

Methods: A total of 66 pts with early RA (ACR/EULAR criteria, 2010) were included. 2010 included: 71% of women, age 56±6.1 years, disease duration 6±8 months; DAS28 5.3 [5.0;5.6], positive for ACCP (100%)/RF (87%), without prior administration of DMARDs and glucocorticoids. All pts underwent blood pressure monitoring (BP), echocardiography, tissue Doppler imaging. Methotrexate (MT) therapy was started in all pts with an escalation of the dose up to 30 mg/week subcutaneously. In case of no remission 3 months later, MT was added with biologic therapy (BT): Adalimumab, Certolizumab pegol, Abatacept, Rituximab. After 18 months 29 (44%) pts achieved remission. Antihtypertensive therapy was administered in 51 (77%) pts: ACE inhibitors, ARBs, beta-blockers, calcium antagonists, diuretics.

Results: At baseline RVDD was detected in 16 (24%) pts. RVDD related factors that remained associated on a multivariable forward stepwise linear regression analysis were body mass index (BMI) (β-coefficient (95% CI) 0.3 [-0.003;0.008], SDAI 0.2 (-0.009;0.001), carotid atherosclerosis (CA) 0.2 (-0.3;0.01), disease duration 0.2 (-0.02;0.001). Multiple coefficient of determination (R2) was 38% (p=0.03). After 18 months the incidence rate of RVDD decreased from 24% to 18%, p=0.05. The dynamics of diastolic function was multidirectional. RVDD was normalised in 10 (63%) of 16 RA pts with RVDD (p<0.02). All of them had effective control of BP and achieved remission, 67% of pts with normalised RVDD received MT+BT. 5 (31%) pts with new cases of RVDD and 6 pts with preserved RVDD did not reach the target values of BP and RA remission.

Conclusions: Presens of CA, higher BMI, SDAI and disease duration strongly associated with the incidence rate of RVDD. A significant decrease of RVDD in case of achieved targeted BP values and RA remission was observed during 18 month therapy of early RA pts in accordance with “T2T” principles.

Disclosure of Interest: None declared