Background: Rheumatoid arthritis (RA) is an inflammatory autoimmune disease, characterized by joint pain, joint swelling in period of active disease and poor sleep.

Objectives: The present study aims to evaluate the sleep disorders in RA patients and to determine their relationship with disease activity.

Methods: This is a cross-sectional study including RA patients followed in the rheumatology department at TAHER SFAR university hospital in Mahdia. All patients were diagnosed with RA based on 2010ACR/EULAR criteria. For each patient, we evaluated the Epworth sleepiness scale (ESS) [0-24] and Pittsburgh sleep score [0-21] with its seven components.

Results: We included 100 participants with a mean age of 53.2 ± 11.2 years [21-76 years] in which most of them (89%) were female. The average duration of diseases was 11.1±8.9 years [1-40 years]. The assessment of the RA activity showed a mean DAS28(ESR) and DAS28(CRP) of 3.88±1.19 [1.6-15] and 4.6 ±1.19 [1.6-15] respectively. Highly active RA (DAS 28 ≥ 5.1) was found in 34 patients. The mean Epworth score was 7.9±5.8 [0-24], 28 patients (28% of cases) had signs of daytime sleepiness (ESS ≥ 11 points). The mean Pittsburgh global score was 6.9±5.1 [0-19]. 51 patients (51% of cases) had disturbed sleep (PSQI >5.5 points). Over half of participants (65.7%) rated the quality of sleep as very good or fairly good. 47.5% of them were scored 0 for sleep duration; however, 17.2% were sleeping fewer than five hours a night. 26 participants had long sleep latency (>1 hour). The average sleep efficiency score was 0.92 ±1.25 [0-3]; only 21 reported such complaints. The mean score for sleep disturbance was 1.19±0.86 [0-3] and for daytime dysfunction was 0.79 ±1.05 [0-3]; however, half of them (55%) presented this complaint. 86.9% of patients have not used a sleeping medication. Statistical analysis showed that the Pittsburgh score was associated with a severe activity stage (p=0.045). Furthermore, we did not found any relationship between ESS and the disease activity.

Conclusion: Sleep disorders are common among RA patients and were frequently associated with severe disease activity.

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AB0243 ASSOCIATION BETWEEN THE GERIATRIC NUTRITIONAL RISK INDEX (GNRI) AND THE DISEASE ACTIVITY IN ELDERLY PATIENTS WITH RHEUMATOID ARTHRITIS

Keywords: Diet and nutrition, Rheumatoid arthritis, Prognostic factors

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Background: The Geriatric Nutritional Risk Index (GNRI) is a tool that assesses the risk of malnutrition-related complications in elderly patients. Some recent publications have suggested that the GNRI could predict disease activity in people followed for rheumatoid arthritis (RA) (1).

Objectives: Our aim was to evaluate the correlation between the GNRI and the disease activity in elderly RA patients.

Methods: This is a cross-sectional study including patients followed for RA and aged at least 65 years. The GNRI was calculated for all patients: GNRI = [1.489·albumin (g/L)] + [417 · weight/WHtO], where WHtO means ideal weight and extremes ranging from 70.06 to 145.02. According to the GNRI, 58 patients (92.1%) had a GNRI > 98 indicating no nutritional risk, 2 patients (3.2%) were low risk with GNRI between 92 and 98, no patient had a GNRI between 82 and 92 indicating moderate risk and 3 patients (4.8%) had a GNRI < 82 indicating a high risk of malnutrition-related complications. After statistical analysis, we found significant association between GNRI and DAS28 score (p=0.05). We also found a significant association between GNRI and higher ESR (p=0.03), CRP (p<0.001) and higher daily doses of corticosteroids (p=0.024).

Conclusion: Our results showed that the GNRI is associated with DAS28, inflammatory biomarkers and higher corticosteroid doses. The GNRI could be used as a simple and reliable tool to assess both nutritional status and disease activity in RA elderly patients.


Disclosures of Interests: None Declared.

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AB0244 ROLE OF FATIGUE IN DIFFICULT TO TREAT RHEUMATOID ARTHRITIS PATIENTS OUTCOME

Keywords: Rheumatoid arthritis, Quality of life, Mental health

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Background: In difficult to treat rheumatoid arthritis patients (D2T RA), a wide spectrum of factors may contribute to the persistence of signs and/or symptoms, although these are not always directly related to inflammation (eg, functional disability, pain and fatigue). Of these, fatigue is still the least evaluated and taken into account.

Objectives: To identify the role of fatigue in D2T RA.

Methods: Cross-sectional study, 143 patients followed up in the rheumatology outpatient clinic of Hospital Clínico San Carlos, Madrid, Spain were included. Data were collected between July 2018 and November 2022. All patients met the ACR/EULAR 2010 criteria and they were in treatment with Biological agents (anti-TNF and Non anti-TNF) or Targeted Synthetic DMARDs (jakinibs). D2T RA was defined based on EULAR criteria (treatment failure, signs suggestive of currently active/progressive disease, and management being perceived as problematic by the rheumatologist and/or patient). Main variable: Fatigue was assessed by the Bristol Rheumatoid Arthritis Fatigue Multidimensional Questionnaire (BRAF-MDQ). Covariates: Sociodemographic and disease-related variables. Statistical analysis: A descriptive and comparative analysis was carried out for the different variables. To identify factors independently associated to D2T RA a multivariable logistic regression was applied. Results were expressed as OR with their corresponding 95% CI. A value of p < 0.05 was consider as statistically significant.

Results: The study population comprised 143 patients and 22 (15.38%) developed D2T RA. The D2T RA group were older, with a higher DAS28 and disability. Sociodemographic, clinical, disease-related variables, and the fatigue scores used in the study are shown in Table 1. In our final logistic regression model, age (OR: 1.05; p=0.017) and fatigue were independently associated with D2T RA (OR: 1.04; p=0.01).

Conclusion: Despite the absence of an explicit mention of fatigue in the definition of AR D2T, it appear to be a main factor explaining the D2T RA outcome. The evaluation and management of fatigue should be one of the objectives in the treatment of patients with RA.
Table 1. Characteristics of the sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>D2T RA (n=22)</th>
<th>Non D2T RA (n=121)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years), mean (SD)</td>
<td>62.82 (13.45)</td>
<td>56.19 (11.89)</td>
<td>0.019</td>
</tr>
<tr>
<td>Women, n (%)</td>
<td>11 (50)</td>
<td>73 (60.83)</td>
<td>0.34</td>
</tr>
<tr>
<td>Disease duration, mean (SD), years</td>
<td>17.67 (8.47)</td>
<td>13.41 (8.74)</td>
<td>0.03</td>
</tr>
<tr>
<td>Positive RF at baseline, n (%)</td>
<td>14 (63.60)</td>
<td>75 (63.02)</td>
<td>0.95</td>
</tr>
<tr>
<td>Positive ACR at baseline, n (%)</td>
<td>14 (63.60)</td>
<td>77 (64.70)</td>
<td>0.90</td>
</tr>
<tr>
<td>DAS28, mean (SD)</td>
<td>4.10 (0.67)</td>
<td>2.46 (0.99)</td>
<td>0.00</td>
</tr>
<tr>
<td>CRP, mean (SD)</td>
<td>0.46 (0.36)</td>
<td>0.46 (0.67)</td>
<td>0.99</td>
</tr>
<tr>
<td>ESR, mean (SD)</td>
<td>15.86 (12.11)</td>
<td>9.87 (9.91)</td>
<td>0.01</td>
</tr>
<tr>
<td>PGHA, mean (SD)</td>
<td>56.22 (24.91)</td>
<td>32.19 (23.88)</td>
<td>0.00</td>
</tr>
<tr>
<td>PhGHA (mm), mean (SD)</td>
<td>275 (13.34)</td>
<td>14.22 (11.37)</td>
<td>0.00</td>
</tr>
<tr>
<td>Pain VAS (mm), mean (SD)</td>
<td>54.45 (25.27)</td>
<td>32.38 (24.21)</td>
<td>0.001</td>
</tr>
<tr>
<td>HAQ (0-3) mean (SD)</td>
<td>1.45 (0.64)</td>
<td>0.76 (0.59)</td>
<td>0.001</td>
</tr>
<tr>
<td>BRAFT-MDQ (0-70), mean (SD)</td>
<td>29.59 (13.67)</td>
<td>21.05 (14.73)</td>
<td>0.01</td>
</tr>
<tr>
<td>Physical (0-20)</td>
<td>13.45 (5.36)</td>
<td>10.49 (5.88)</td>
<td>0.02</td>
</tr>
<tr>
<td>Living (0-21)</td>
<td>7.22 (4.29)</td>
<td>4.63 (4.71)</td>
<td>0.02</td>
</tr>
<tr>
<td>Cognitive (0-15)</td>
<td>4.68 (3.86)</td>
<td>3.27 (3.23)</td>
<td>0.07</td>
</tr>
<tr>
<td>Emotional (0-12)</td>
<td>4.22 (2.54)</td>
<td>2.65 (2.66)</td>
<td>0.01</td>
</tr>
<tr>
<td>BRAFT-NRS, mean (SD)</td>
<td>4.69 (2.32)</td>
<td>4.09 (2.80)</td>
<td>0.13</td>
</tr>
<tr>
<td>Fatigue severity (0-10)</td>
<td>4.13 (2.29)</td>
<td>3.28 (2.49)</td>
<td>0.13</td>
</tr>
</tbody>
</table>

D2T RA: difficult-to-treat rheumatoid arthritis; SD: standard deviation; RF: rheumatoid factor; ACPA: anti-citrullinated-protein antibody; DAS28: 28-joint disease activity score; CRP: C-reactive protein; ESR: erythrocyte sedimentation rate; PGHA: patient global health assessment; PhGHA: physician global health assessment; VAS: visual analog score; HAQ: Health Assessment Questionnaire; BRAFT-MDQ Bristol Rheumatoid Arthritis Fatigue Multidimensional Questionnaire; BRAFT-NRS: Bristol Rheumatoid Arthritis Fatigue Numerical Rating Scales.

REFERENCES: NIL.

Disclosure of Interests: None Declared.

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AB0245 IMPACT OF EXTRA-ARTICULAR RHEUMATOID ARTHRITIS MANIFESTATIONS ON ATLANTOAXIAL SUBLUXATION

Keywords: Prognostic factors, Osteoporosis, Rheumatoid arthritis

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Background: The cervical spine is frequently affected during RA. It’s the third joint location after the hands and feet [1].

Objectives: The objective of our work was to investigate the association between atlanto-axis subluxation (AAS) and the presence of extra-articular manifestations (EAM).

Methods: This is a cross-sectional comparative, single-center and hospital-based study of 102 RA patients (ACR/ EULAR 2010). Population was divided into two groups: Group 1 (study group) including 51 patients with AAS and Group 0 (control group) including 51 RA patients without AAS. AAS was defined as: the presence of an anterior C1-C2 diastasis on the cervical spine radiograph in hyperflexion and/or by the presence of anterior, posterior, lateral or rotational C1-C2 dislocation on MRI with/without inflammatory signal.

Results: The study group (G1) consisted of 37 women and 14 men (M/F sex ratio = 0.37). The control group (G0) consisted of 40 women and 11 men (M/F sex ratio =0.35). The mean age was 60.3 ± 14.3 and 59 ± 11.6 years in G1 and G0, respectively. Median disease duration was 146 [64-298] and [5-216] months in G1 and G0 respectively. In G1, the median time to onset of AAS was 48 months [0-492]. At AAS diagnosis, EAM were present in 49% of G1 patients: dry ocular and/or mouth syndrome (60%), pulmonary involvement (16%) (3 cases of usual interstitial pneumonia and one case of constrictive bronchitis) and rheumatoid subcutaneous nodules (24%). Furthermore, 30 patients of G1 had bone densitometry. Osteoporosis and osteopenia were found respectively in 66% and 26% of cases. In the control group, only 3.9% of G0 patients had EAM. It was dry ocular syndrome in 2 patients. Bone densitometry, performed in 34 patients, was normal in 26.5% of cases. Osteoporosis and osteopenia were found respectively in 35.3% and 38.2% of patients. In analytical study, patients of G1 had higher prevalence of EAM (p<0.001) and osteoporosis (p=0.012). Though, no association was found between the presence of AAS and osteoporosis (p=0.79).

Conclusion: In this work, patients with AAS had significantly more EAM and osteoporosis. A regular monitoring of cervical spine radiographic assessment in these patients is highly recommended to prevent such complication.

REFERENCES:

Disclosure of Interests: NIL.

DOI: 10.1136/annrheumdis-2023-eular.3950

AB0246 IMPACT OF RHEUMATOID ARTHRITIS DISEASE ACTIVITY ON PATIENT’S NUTRITIONAL STATUS

Keywords: Quality of life, Diet and nutrition, Rheumatoid arthritis

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Background: Rheumatoid arthritis (RA) is a potentially destructive chronic inflammatory disease that can be responsible for a deterioration of quality of life. Deformities, loss of autonomy and depression can lead to malnutrition in these patients.

Objectives: The aim of this study was to evaluate the impact of RA disease activity on the patient’s nutritional status.

Methods: We conducted a cross-sectional study including RA patients according to the ACR/EULAR 2010 criteria. Sociodemographic data and disease parameters were collected. RA activity was assessed using the Disease Activity Score (DAS28), C-reactive protein (CRP) and ESR. Nutritional status was assessed by the Mini-Nutritional Assessment (MNA). Then, the patients were divided into two groups: Group 1: no risk of malnutrition if the MNA score was >23.5 and Group 2: risk of malnutrition (if the MNA score was between 17 and 23.5) or poor nutritional status (if the MNA score was <17). The significance value “p” was set at 0.05.

Results: A total of 30 patients were included. The gender ratio was 0.43 with a female predominance. The mean age was 57.8±13.8 years [25-79]. The most frequent comorbidities were arterial hypertension (43.3%), diabetes (20%) and gastritis (16.7%). RA was immunopositive and erosive in 80% of cases. The mean duration of the disease was 14.4 years [13-23]. More than half of the patients (55.5%) were on prednisone, 13.8% were on sulphasalazine and 6.9% were on methotrexate. 27.6% were on biologic therapy, 13.8% were on sulphasalazine and 6.9% were on hydroxychloroquine. The mean value of the visual analogue pain scale was 4.7 [0-9] and the mean value of the patient’s global assessment was 5 [2-9]. The mean ESR and CRP values were 50.6mm [3.9-131] and 22.2mg/l [0.9-77], respectively. The mean DAS-28ESR was 4.2±0.3 [1.3-9.1] reflecting moderate activity. The mean body mass index was 25.1±4.45kg/m² [16.8-39] and the mean brachial muscle circumference was estimated at 26.1±3.6cm [20-31]. The mean DAS28 ESR score was higher in G2, but the difference was not statistically significant. A significant association was noted between RA activity level and patient nutritional status (p=0.017). In patients with high activity, 71.3% were at risk of malnutrition and one patient was in poor nutritional status. Among patients with moderate activity, 42.9% were at risk of malnutrition and 50% had normal nutritional status. Among patients with low activity, the majority (80%) had normal nutritional status.

Conclusion: Our study shows an impact of RA disease activity on the patient’s nutritional status. The higher the disease activity, the higher the patient’s risk of malnutrition.

REFERENCES: NIL.

Disclosure of Interests: None Declared.

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