**CATASTROPHIZING IN PATIENTS WITH RHEUMATOID ARTHRITIS**

C. Traversor, B. Coste, E. Filhol, D. Caillet, S. Laurent-Chaballer, S. Benamara, B. Combe, J. Luks, J. Morel, C. Hua, C. Gaujoux-Viala, N. Nîmes University Hospital, Rheumatology, Nîmes, France; University of Montpellier, IDESP UMR-INSERM, Montpellier, France; CHU Lapeyronie, Rheumatology, Montpellier, France; University of Montpellier, Montpellier, France; Nîmes University Hospital, BESPIM, Nîmes, France

**Background:** Catastrophizing is conceptualized as a negative cognitive-ffective response to an anxiety-provoking stimulus, especially anticipated or actual pain. Catastrophizing Scale (PCS)1. Catastrophizing plays a role in maintaining chronic pain and response to an anxiety-provoking stimulus, especially anticipated or actual pain. Catastrophizing is linked to anxiety, depression, disease activity, function impairment and insomnia. It may be interesting to detect catastrophizing in order to improve the management of our patients.

**Objectives:** To assess the prevalence of catastrophizing and associated factors in rheumatoid arthritis (RA).

**Methods:** We performed an observational, prospective, bi-centric study. All patients aged 18 or over with RA and fulfilling the ACR-EULAR 2010 criteria were consecutively included. Sociodemographic data, information on the disease and its treatments were collected as well as questionnaires for disease activity (DAS28, function (HAQ), quality of life (SF12, EQ5D), anxiety and depression (HADS, GAD7), fibromyalgia (FiRST), insomnia (ISI) and catastrophizing was significantly associated with DAS28-CRP (OR=1.61 [1.18-2.20]), HADS score was 18 [7-28]. In multivariate logistics regression, high-level catastrophizing was significantly increased in pure AI patients with ID [high sTfR levels (≥3 µg/mL)] with a mean of 79.0±23.97 ng/mL.

**Conclusion:** Hepcidin measurement can provide a useful tool for differentiating AI from IDA and also help to identify an iron deficiency in AI patients. This might aid in the appropriate selection of therapy for these patients.

**Disclosure of Interests:** None declared

**REFERENCES:**

---

**Table 1. Baseline characteristics and BMI of the patients**

<table>
<thead>
<tr>
<th>Age and sex matched group</th>
<th>N</th>
<th>RA</th>
<th>PsA</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All bDMARD patients</strong></td>
<td>1834</td>
<td>2741</td>
<td>484</td>
<td>0.000*</td>
</tr>
<tr>
<td>Female, n (%)</td>
<td>1470 (80.2)</td>
<td>2257 (45.9)</td>
<td>334 (69.0)</td>
<td>0.000*</td>
</tr>
<tr>
<td><strong>Age, years</strong></td>
<td>52.9±13.4</td>
<td>43.1±11.4</td>
<td>47.4±12.2</td>
<td>0.000*</td>
</tr>
<tr>
<td><strong>BMI, kg/m²</strong></td>
<td>26.9±18.7</td>
<td>24.3±16.5</td>
<td>26.9±17.8</td>
<td>0.000*</td>
</tr>
<tr>
<td><strong>Disease duration, years</strong></td>
<td>11.7±11.7</td>
<td>12.3±10.6</td>
<td>11.2±9.8</td>
<td>0.000*</td>
</tr>
<tr>
<td><strong>Body mass index</strong>, obesity, n (%)</td>
<td>811 (44.2)</td>
<td>815 (29.7)</td>
<td>199 (41.1)</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

* Mean ± S.D; Median (IQ)
Conclusion: Although obesity was more frequently reported in RA and PsA patients, age and gender seemed to be the major factors in the occurrence of this difference rather than inflammatory arthritis subgroups. Therefore, when considering obesity as a factor in the registries, for instance biological registries, sex and age should be kept in mind.

REFERENCES:

Figure 1. BMI regarding to sex and diseases subtypes

Disclosure of Interests: None declared
DOI: 10.1136/annrheumdis-2021-eular.3312

POS0569 LONG-TERM OUTCOMES OF CHILDREN BORN TO WOMEN WITH RHEUMATOID ARTHRITIS

N. Calin1, A. T. Florescu2, F. Bobica3, C. Tataru4, I. Ancuta5, M. Bojnic6, C. Mihal7, A. Balanescu8, A. Musetescu4, M. Micu9, C. Ancuta5, V. Stoica10, L. Andreoi11, B. Ancu12, Carol Davila University of Medicine and Pharmacy, Rheumatology, Bucharest, Romania; 3 Cantacuzino Hospital, Internal Medicine and Rheumatology, Bucharest, Romania; 4 Carol Davila University of Medicine and Pharmacy, Surgery, Bucharest, Romania; 5 Emergency Hospital Saint Pantelimon, Rheumatology, Focsani, Romania; 6 Zurich University Hospital, Rheumatology, Zurich, Switzerland; 7 St Maria Clinical Hospital, Internal Medicine and Rheumatology, Bucharest, Romania; 8 University of Medicine and Pharmacy of Craiova, Rheumatology, Craiova, Romania; 9 Clinical Rehabilitation Hospital, Rehabilitation II, Cluj-Napoca, Romania; 10 Grigore T. Popa University of Medicine and Pharmacy, Clinical Hospital of Rehabilitation, Iasi, Romania; 11 University of Brescia, Clinical and Experimental Sciences, Brescia, Italy; 12 Spedali Civili Hospital, Rheumatology and Clinical Immunology, Brescia, Italy

Background: Children born to women with rheumatoid arthritis (RA) have increased incidences of severe health problems and a potential excess risk of specific diseases during childhood and adolescence [1]. Further studies aimed at confirming long-term consequences in the offspring are needed.

Objectives: To evaluate whether maternal RA has an impact on the health and developmental outcomes of the offspring.

Methods: A retrospective descriptive study was conducted on data regarding 43 children born to mothers diagnosed with either RA or juvenile idiopathic arthritis (JIA) prior to conception. Participants were recruited from several Clinics of Rheumatology located across Romania. Data on neonatal outcomes, lactation, developmental milestones, childhood illnesses, and hospitalizations was collected using a patient-reported questionnaire completed by maternal participants in 2020.

Results: Favorable neonatal outcomes were found in 81% of the participants; however, children of mothers with RA had a higher occurrence of favorable outcomes than those with JIA (p = 0.009). Adverse neonatal outcomes reported include the following: small for gestational age (11.6%), intrauterine growth restriction (4.8%), and preterm births (2.75%). There were no incidences of congenital malformations. The mean birth weights of offspring born to mothers with RA are higher than those with JIA (p = 0.00829).

While the majority of the children were breastfed (88.4%), those who were not breastfed were hospitalized more often than those who were breastfed for any period of time (p = 0.03). Mothers who experienced a postpartum flare up within the first 4 months breastfed their children significantly less than those who did not have a flare up (14.6% versus 48 weeks, p = 0.00011).

Conclusion: Maternal RA was found to be associated with increased incidences of adverse neonatal outcomes, childhood hospitalizations, recurrent EFT infections, allergies, and atopic dermatitis. However, overall health outcomes of offspring did not show alarmingly significant excess morbidity.

REFERENCES:

Disclosure of Interests: None declared
DOI: 10.1136/annrheumdis-2021-eular.3312

POS070 ASSOCIATION OF BODY FAT MASS AND ITS DISTRIBUTION WITH DISEASE ACTIVITY, PAIN AND DISABILITY IN RHEUMATOID ARTHRITIS

O. Lamkanfi1, H. Azouzzi2, L. Linda1, M. Mohammed VI University Hospital, Mohammed I University Faculty of Medicine, Rheumatology, Oujda, Morocco

Background: Rheumatoid arthritis (RA) and body composition are closely related. Recent studies have found a significant association between fat mass and disease activity and disability in RA [1].

Objectives: We aimed to study the association between body fat mass and its distribution with disease activity, disability, and pain in RA patients.

Methods: This is a cross-sectional study of patients with RA diagnosis according to ACR-EULAR 2010 classification recruited from first January 2021. Those with prior cancer, hyperparathyroidism, hyperthyroidism, diabetes, chronic kidney disease, and cirirosis were excluded. Body fat mass (BFM) and its distribution (gynoid (GFM), android (AFM), visceral (VFM), limbs (LFM), trunk (TFM)) were measured using dual-energy X-ray absorptiometry (Hologic, Horizon QDR2000). Clinical data and laboratory tests of the same day of the DXA scan were analyzed. The associations between BMI and its distribution with disease activity score (DAS28CRP), pain visual analogue scale (VAS), and disability measured by health assessment questionnaire (HAQ) were explored. Obesity was defined as a body mass index (BMI) ≥ of 25kg/m2. Our statistical analysis was based on descriptive study, comparisons and linear regressions using SPSS 20.

Results: It is about 69 RA patients. Their mean age was 49.86 ± 14.33 years. Adverse outcomes were found in 49.86 ± 14.33 years. The mean DAS28CRP was 2.56 ± 1.27, and mean disease duration was 14.84 ± 10.99 years. Sixty-two (89.9%) were women. The mean BMI was 26.46 ± 5.26kg/m2, and 41 patients were obese (59.4%). Compared with non-obese patients, obese patients had a higher C-reactive protein (p = 0.03). DAS28CRP was higher in obese patients (2.77 ± 1.41 vs 2.25 ± 0.97) but did not reach significance (p = 0.07). We did not find any difference between the two groups regarding pain and disability. In univariate regression analysis, the LFM was positively associated with disease activity (p = 0.001; β = 0.38), pain (p = 0.001; β = 0.38) and disability (p = 0.007; β = 0.32). Adjusted on BMI, LDL cholesterol, triglyceride, cumulative dose of corticosteroid, disease and corticosteroid duration, menopause duration, dose and duration of methotrexate, we found a significant association between LF M, disability (p = 0.02; β = 0.51), disease activity (p = 0.02; β = 0.54) and pain (p = 0.008; β = 0.57). However, we had no association between disease activity, pain, and disability with BFM and the other components.

Conclusion: Limbs fat mass was significantly associated with the activity, disability, and pain in RA patients.