HPR Measuring health (development and measurement properties of PROs, tests, devices)

POS1387-HPR | THE IMPACT OF PSYCHOEMOTIONAL MOOD DISORDERS ON MUSCULOSKELETAL PAIN IN PATIENTS WITH INFLAMMATORY JOINT DISEASES

Keywords: Pain, Prognostic factors, Quality of life

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Background: Chronic inflammatory joint diseases such as rheumatoid arthritis (RA), ankylosing spondylitis (AS) and psoriatic arthritis (PsA) are most common rheumatic diseases that may cause musculoskeletal pain [1]. The genesis of pain is very complex and many different mechanisms are involved. It is the result of multiple biochemical reactions and is influenced to varying degrees by biological, physiologic and social factors. (2) The presence of pain is largely determined by the inflammatory activity of the underlying disease, but subjective factors that depend on the psycho-emotional state of the patient are involved in the assessment of the severity of pain symptoms [3].

Objectives: The aim of the study is to assess the intensity of musculoskeletal pain - arthralgia and myalgia and its correlation with anxiety and depressive mood disorders among a Bulgarian cohort of patients with chronic inflammatory diseases.

Methods: A single-center, observational study including patients with RA, AS and PsA, discharge in the Rheumatology clinic, "St. Marina" UMBAL - Varna. All the patients were diagnosed according to the criteria for the specific inflammatory joint disease and were treated with a biological medication. Visual analogue scales (VAS) to assess pain intensity (muscular and joint) and Zung self-report scales for depression (SDS) and anxiety (SAS) were used. Laboratory acute phase indicators were investigated in all patients. Descriptive statistics, one-Sample T test, correlation and linear regression analyses were used. A significance level of p<0.01 was accepted.

Results: 130 patients with inflammatory joint disease (RA, AS, PsA), were included in the study. The average age of the study population was 56.37 years (from 21-76 years). 41.5% (n=54) of them were women, 58.5% (n=76) were men. No significant differences were found in evaluating the visual-analog scales for assessing joint and muscle pain between men and women (p=0.177 for joint pain and p=0.717 for muscular pain). On the other hand women scored higher on the anxiety and depression scales, and the difference was again significant (p<0.001 for the depression scale and p=0.001 for the anxiety scale). The self-assessment on the depression scale (SDS) shows a significant correlation with the self-assessment of muscle and joint pain, but the self-reported anxiety scale (SAS) showed a significant correlation only with the self-reported joint pain (SDS and VASm, p=0.008; SDS and VASa, p=0.001; SAS and VASm, p=0.031, SAS and VASa, p=0.004 respectively). Inflammatory indicators (predictors) determine about 8% of the variation of the two pain indicators - for joint pain - R square 78%, for muscle pain - R square 81%.

Conclusion: Musculoskeletal pain is one of the most common clinical presentations of inflammatory joint diseases. Chronic pain can lead to mood disorder. The intensity of the pain correlates with anxiety and depressive symptoms in these patients.

REFERENCES:


Acknowledgements: NIL.

Disclosure of Interests: None Declared.

DOI: 10.1136/annrheumdis-2023-eular.4528

POS1388-HPR | RELATIONSHIP BETWEEN CENTRAL SENSITIZATION AND PSYCHOLOGICAL FACTORS IN RHEUMATOID ARTHRITIS: A CROSS-SECTIONAL, MULTICENTER STUDY

Keywords: Rheumatoid arthritis, Quality of life. Patient reported outcomes


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Background: Affective distress (clinically significant depression, anxiety and stress) and central sensitization (CS) are consistently associated with the reported sensitivity and severity of pain, physical disability, poor treatment outcomes, and inflammatory disease activity, and potentially with early mortality in rheumatoid arthritis (RA).

Objectives: We aimed to explore affective distress in patients with RA and determine how they connected to CS.

Methods: Used the CSI to measure CS and the Depression, Anxiety and Stress Scale - 21 Items (DASS-21) to evaluate the negative emotional states of depression, anxiety and stress. The total CSI score ranges from 0 to 100, and a score of 40 or greater has been established to indicate CS. Each of the three DASS-21 scales contains 7 items, divided into subscales with similar content. Multiple regression analysis was used to find out which factors were most likely to be linked to CS.

Results: Overall we included 192 RA patients (age ranging from 22 to 86 years) with a mean disease duration of 5.95 (SD 13.75) years. The CSI score was ≥ 40 in 70/192 patients (36%). The mean DASS-21 total score was 32.3 (SD29.8). The mean Anxiety score (Mean=10.68 and SD=8.92 was in the moderate range (10-13), whereas the mean Depression (Mean = 10.11 and SD = 11.66) and Stress (Mean = 15.8 and SD=12.05) scores were in the mild range (10-13 and 15-18, respectively). In the 70 patients with CSI score > 40, the mean Anxiety score (Mean=12.20 and SD=8.92 was in the moderate range (10-13), whereas the mean Depression (Mean = 10.11 and SD = 11.66) and Stress (Mean = 15.8 and SD=12.05) scores were in the mild range (10-13 and 15-18, respectively). In the 70 patients with CSI score > 40, the mean Anxiety score (Mean=12.20 and SD=8.92 was in the moderate range (10-13), whereas the mean Depression (Mean = 10.11 and SD = 11.66) and Stress (Mean = 15.8 and SD=12.05) scores were in the mild range (10-13 and 15-18, respectively).

Conclusion: Affective distress symptoms (clinically significant depression, anxiety and stress) and CS are common in RA patients. Screening and recognition of such psychosocial disorders may help patients achieve optimal disease control and a good outcome. Overall, our findings have implications for health policy and emphasize the significance of identifying high-risk fibromyalgia (FM) patients by monitoring CS as an indicator of severe disease.

REFERENCES:
Juvenile systemic sclerosis (jSSc) is an extremely rare orphan disease. To date, there is very limited published data regarding incidence and prevalence of jSSc. Specifically, there are no published data on jSSc incidence rates by age group and only one Colombian report of jSSc prevalence rates by age group. These data are important given the significant developmental differences between age subsets.

**Objectives:** To evaluate jSSc age-subset incidence and prevalence using U.S. administrative claims data.

**Methods:** Children <18 years old with medical claims for SSC and who received methotrexate, mycophenolate mofetil, or cyclophosphamide at a pediatric age (≤12 years old) were identified from the OPTUM Clinformatics claims database. Results: Adjusted incidence and prevalence estimates are presented in the table below. Overall, jSSc incidence and prevalence rates among children in the US were 1.4 per million person-years (PY) and 73 per million, respectively. Both incidence and prevalence rates increased with age.

<table>
<thead>
<tr>
<th>Age</th>
<th>Adjusted incidence per 1,000,000PY</th>
<th>Adjusted prevalence per 1,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall (0-18)</td>
<td>1.4 (0.9, 1.9)</td>
<td>73 (5.5, 9.1)</td>
</tr>
<tr>
<td>0-6</td>
<td>0.6 (0.01, 1.4)</td>
<td>0.6 (0.01, 1.4)</td>
</tr>
<tr>
<td>6-10</td>
<td>0.5 (0.01, 1.1)</td>
<td>3.1 (0.6, 5.6)</td>
</tr>
<tr>
<td>10-12</td>
<td>1.7 (0.03, 3.3)</td>
<td>5.2 (0.6, 9.7)</td>
</tr>
<tr>
<td>&gt;12</td>
<td>2.7 (1.5, 3.8)</td>
<td>16.6 (12, 21.0)</td>
</tr>
</tbody>
</table>

**Conclusion:** jSSc is an extremely rare disease with incidence and prevalence rates increasing with age. Specifically, incidence and prevalence rates vary dramatically for different age subsets, with increasing rates at 10 years and older. To our knowledge, this is the first study to estimate jSSc incidence and prevalence rates by age group.

**REFERENCES:** NIL.

**Disclosure of Interests:** NIL.

**Acknowledgements:** NIL.

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**HPR Epidemiology and public health (including prevention)**

**Keywords:** Systemic lupus erythematosus, Autoantibodies, Clinical trials

**Disclosure of Interests:** None Declared.

**Acknowledgements:** NIL.

**Disclosure of Interests:** None Declared.

**DOI:** 10.1136/annrheumdis-2023-eular.4868