POSTURAL PROBLEMS AND PAIN IN PATIENTS WITH JUVENILE IDIOPATHIC ARTHRITIS

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Background: Juvenile idiopathic arthritis (JIA) is a chronic autoimmune condition of unknown etiology. JIA combine with joint pain and inflammation resulting in joints arthritis, pain and deformities. Disturbances in the posture may occur before deformities in patients with JIA. In some cases, pain can also lead to postural deterioration. Postural control is the ability to maintain equilibrium in a gravitational field by keeping or returning the center of body mass over its base of support.

Objectives: The first purposes of this study was to assess postural problems in patients with JIA and compared with healthy peers. The other objective was to examine the pain relationship with postural problems.

Methods: 19 patients with JIA aged 5–17 years (13 girls and 6 boys) diagnosed according to ILAR classification criteria and 19 healthy controls were enrolled in this cross-sectional study. “PostureScreen Mobile®” was used to evaluate static posture, “11-point Numeric Analogue Scale (NRS)” was used to evaluate the pain (during rest, activity and exercise). The PostureScreen Mobile® an application facilitates the assessment of posture in a variety of settings. Anterior (Head, Shoulders, Ribcage, Hips) and lateral translation (Head, Shoulders, Hips, Knees) were recorded and calculated as a total score for anterior and lateral. For statistical analysis SPSS Version 21.0 program was used.

Results: The mean age and body mass index of patients and healthy control was 10.79±3.59 and 10.68±2.86 years, 17.05±3.38, and 18.50±2.49 kg/m², respectively. The mean of NRS-rest and exercise scores were 1.81±1.42, 3±2.64 and 1.91±2.02, respectively. As a result of postural assessment for patients and healthy control, the mean of anterior translation scores was significantly higher in patients with JIA than healthy control (p=0.014) (table 1). Two significant correlations with NRS-rest between hip anterior translation (r=0.375, p=0.029) and ribcage anterior translation (r=−0.534, p=0.027) were found.

Table 1 Anterior and lateral translation in patients with JIA and healthy controls

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<tr>
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<th>JIAmean ± sD</th>
<th>Healthy controlmean ± sD</th>
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<th>p</th>
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</thead>
<tbody>
<tr>
<td>Anterior</td>
<td>4.16±1.91</td>
<td>2.82±1.16</td>
<td>2.602</td>
<td>0.014</td>
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<tr>
<td>Lateral</td>
<td>9.03±3.45</td>
<td>8.41±3.35</td>
<td>0.490</td>
<td>0.627</td>
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Conclusions: We found that children with JIA have minimal postural problems according to their healthy peers. At the same time, pain during rest is associated with anterior postural deterioration. Therefore in future researches, translations in the posture should be evaluated comprehensively in children with JIA for larger sample size. If it is not intervened in the early period, it may lead to overload of joints and increased pain in later periods.

Disclosure of Interest: None declared

DISEASE ACTIVITY AFFECTS FAT MASS INDEX AND FUNCTIONAL CAPACITY OF RA PATIENTS OVER 12 MONTHS


Background: Rheumatoid cachexia (RC) is a condition characterized by adverse changes in body composition, specifically in muscle mass and fat mass components. RA patients have life quality and expectative impacted by RC [2], but there are very few prospective data analyzing the evolution of this condition.

Objectives: To assess body composition, RC, clinical features and functional capacity in RA patients followed for 12 months.

Disclosure of Interest: None declared

PHYSICAL ACTIVITY AWARENESS AND PREFERENCES IN RHEUMATIC DISEASES: A QUALITATIVE STUDY

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Background: Physical inactivity is the fourth leading cause of death (1) and a risk factor for cardiovascular disease (CVD). Patients with rheumatic diseases (RDs), especially rheumatoid arthritis (RA), report low cardiorespiratory fitness levels (2), placing them at an increased risk of premature mortality and CVD.

Objectives: The aims of the present study were: a) to evaluate if patients with RDs (RA, ankylosing spondylitis (AS), systemic lupus erythematosus (SLE), osteoarthritis (OA), psoriatic arthritis (PSA), systemic sclerosis (SSc), fibromyalgia (FM), enteropathic arthritis-Crohn’s disease (CD), Sjögren’s syndrome (SD), Raynaud’s disease (RD)) were aware of the physical activity (PA) benefits, and b) to examine their preferences in terms of PA mode and principles (i.e. intensity, duration, frequency).

Methods: We designed a questionnaire consisted of dichotomous, open-ended and multiple-choice questions. Patients registered with the Hellenic League Against Rheumatism (EL.E.A.N.A), participating by filling in the questionnaire a online, or b) through phone calls. Content analysis approach was used for data analysis.

Results: Out of the 625 RDs patients registered with the EL.E.A.N.A, 197 (31.5 %) responded and returned the questionnaire [137 online and 60 via phone calls (69.6% and 30.4% of the sample, respectively)]; 93 patients had RA (47.3% of the sample, age=54.9±14.5) and 104 (52.7% of the sample, age=50.2±13.9) were diagnosed with other RDs (AS (n=29, 14.7%), SLE (n=25, 12.6%), OA (n=15, 7.6%), PSA (n=10, 5%), SSC (n=8, 4%), FM (n=7, 3.5%), CD (n=4, 2%), SD (n=4, 2%) and RD (n=2, 1%). In all patients, subjective beliefs about the benefits of PA, concerned three main themes: a) functional ability, b) mental health and c) overall health. Swimming, was revealed as the most preferred PA mode (n=63, 38.1%).

Regarding the principals of PA, patients reported that they preferred moderate intensity (n=76, 41.7%), a duration of "about an hour" (n=81, 49.3%), a frequency of “2–3 times per week” (n=71, 45.2%) and a blended intervention consisted of group-based, individualised and supervised programmes (n=56, 29.4%). The questionnaire was judged by the patients to be very or fairly understandable in almost all cases (n=196, 99.5%).

Conclusions: According to subjective beliefs from the self-reported data of this study, PA is considered from patients to improve physical and mental health in RDs. Additionally, individualisation and supervision of PA programmes were considered amongst the most important parameters of a program for participation. In planning successful PA regimes in RDs, more qualitative studies with representative sample sizes and demographic data are required to address patients’ PA needs and preferences and help them adhere to a more physically active lifestyle.

REFERENCES: