dimension (Dim 1) related to the presence of loss of the vascular pattern in the ileum (CC 0.325), FC + diarreha (CC 0.695), FC + abdominal pain (CC 0.863) and a secondary dimension (Dim 2) that collected the variables serum SlaG (CC 0.513), ASDAS-CRP ≥ 2.1 (CC 0.311), CD71 (CC 0.424), please see Figure 1.

Figure 1. Multiple correspondence discriminant analysis for CD71, serum SlaG and activity index in SpA patient

Conclusion: The findings reflect a possible relationship among the apical expression of CD71 in ileum with high levels of serum SlaG and activity, suggesting that retrotranscytosis mediated by this receptor might be a mechanism that mediate the intestine-joint axis in SpA.

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Disclosure of Interests: None declared


POS0333 CIRCULATING NON-CLASSICAL CD14LOW/CD16+ MONOCYTES AND THEIR EXPRESSION OF ARGINASE-1 ARE ASSOCIATED WITH THE ACTIVITY OF AXIAL SPONDYLOARTHRITIS

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Background: Human peripheral blood monocytes represent heterogeneous population and can be divided into three major populations, classical (CD14+CD16−), intermediate (CD14−CD16+) and non-classical (CD14−CD16+) monocytes. All three monocyte populations are thought to have different functional activity, including their pro- and anti-inflammatory activity. The ratio between monocyte populations could change in inflammatory conditions that it is thought to be important for the development of adequate immune responses. Axial spondyloarthritis (axSpA) being autoimmune diseases is currently classified as an autoimmune inflammatory disease based on a strong inflammatory component. It is accepted that increased concentration of pro-inflammatory mediators can cause an impairment of myelopoiesis.

Objectives: The present study aimed to analyze the frequency of blood monocyte subpopulations and their expression of the suppressor molecule arginase-1 (Arg1) in patients with axSpA.

Methods: The study included 14 healthy donors and 19 axSpA patients aged 23 to 59 years, including 15 men and 4 women. Ankylosing Spondylitis Disease Activity Score (ASDAS) was used to assess disease activity and high activity was determined as ASDAS≥2.1. The disease duration at the time of the study was 12 years (median). Phenotypic analysis of blood monocytes was performed by flow cytometry based on CD14 and CD16 expression.

Results: The frequency of monocyte subpopulations in patients with low/moderate activity of axSpA did not differ from the donor group. Patients with high very high disease activity showed an increased relative number of non-classical CD14−CD16− monocytes (vs donors p=0.007). All donor monocyte subpopulations expressed suppressor intracellular molecule Arg1 with higher expression in intermediate and non-classical monocytes. The expression of Arg1 in CD14+CD16+ monocytes was significantly reduced in patients with high activity (vs donors Me 41.5 vs 76.5%, p=0.01). Patients with the presence of peripheral articular manifestations of axSpA were characterized by a decreased Arg1 expression in non-classical monocytes compared with the donor group (p=0.02). However, patients without peripheral manifestations demonstrated a significant reduction of Arg1 expression in all monocyte subpopulations (p<0.05).

Conclusion: Shifting of monocyte subpopulation toward a higher number of non-classical monocytes with the decrease in the expression of the suppressor molecule Arg1 in the high activity of axSpA can play important role in terms of the possible involvement of monocytes in maintaining inflammation and its regulation in autoinflammatory disease. The reported study was funded by State Budgeted Project (registration ID 122011800324-4, 122011800108-0, 122012000373-3).

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New insights into the management of JIA

POS0334 DRIVERS OF NON-ZERO PHYSICIAN GLOBAL SCORES DURING PERIODS OF INACTIVE DISEASE IN JUVENILE IDIOPATHIC ARTHRITIS

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Background: The ACR provisional criteria for defining inactive disease (ID) in Juvenile Idiopathic Arthritis (JIA) requires that the physician’s global assessment of disease activity (PhGA) is marked as 0 on the visual analog scale (VAS). However, some investigators have noticed the tendency of some clinicians to mark the PhGA>0 even on resolution of active disease. Due to the fact that the PhGA and the count of active joints are the two main physician-centered measures included in ID criteria the analysis of their discordance may be of importance to address the issue.

Objectives: To investigate the frequency in which the physician provides a global assessment of disease activity (PhGA)>0 and an active joint count (AJC)=0 in children with juvenile idiopathic arthritis (JIA) and search for determinants of divergence between the two measures.

Methods: Data were extracted from a multinational cross-sectional dataset of 7265 patients who had JIA by ILAR criteria, were recruited between 2011 and 2016 and had both PhGA and AJC recorded by the caring paediatric rheumatologist at the study visit. Determinants of discordance between PhGA and AJC=0 were searched for by multivariable logistic regression and dominance analysis.

Results: The PhGA was scored >0 in 1211 (32,4%) of 3668 patients who had an AJC=0 of 0 in 536 patients (14,6%) the PhGA was the single most frequent reason for not meeting the ID definition in patients with AJC=0. Independent associations with discordant assessment were identified for tender or restricted joint count>0, history of entheses, presence of active uveitis or systemic features, enthesitis-related or systemic arthritis, increased acute phase reactants, pain visual analog scale (VAS)>0, and impaired physical or psychosocial wellbeing. In dominance analysis, tender joint count accounted for 35,43% of PhGA variance, followed by restricted joint count>0 (16, 14%) and physical health score >0 (11,42%) (Figure 1).

Figure 1. Dominance analysis of relative importance of predictive factors in explaining the variance in PhGA.
Conclusion: We found that many paediatric rheumatologists did not mark a score of 0 for patients who they found not to have active joints. The presence of pain in joints not meeting the definition of active joint used in JIA was the main determinant of this phenomenon.

REFERENCES:

Disclosure of Interests: Ana Isabel Rebollo Gimenez: None declared, Alessandra Alongi: None declared, Gabriela Giancane: None declared, Roberta Naddafi: None declared, Valentina Nalini: None declared, Niccolò Ruperto Speakers bureau: NR has received honoraria for consistencies or speaker bureaus from the following pharmaceutical companies in the past 3 years: 2 Bridge, Agen, AstraZeneca, Aurinia, Bayer, Bristol Myers and Squibb, Celgene, EMD Serono, Glaxo Smith Kline, Idorsia, Janssen, Eli Lilly, Novartis, Pfizer, Sobi, UCB, Consultant of: NR has received honoraria for consultancies or speaker bureaus from the following pharmaceutical companies in the past 3 years: 2 Bridge, Agen, AstraZeneca, Aurinia, Bayer, Bristol Myers and Squibb, Celgene, EMD Serono, Glaxo Smith Kline, Idorsia, Janssen, Eli Lilly, Novartis, Pfizer, Sobi, UCB, Alessandro Consolaro Consultant of: AC has received honoraria from Abbvie in the past 3 years. Angelo Ravelli Speakers bureau: AR has received honoraria for speaker bureaus from the following pharmaceutical companies in the past 3 years: Abbvie, Angelini, Pfizer, Novartis, Reckitt Benkiser, Sobi, Alexion, Roche DOI: 10.1136/annrheumdis-2022-eular.1413

POS0335 IMPROVED PAIN COPING SCALE FOR CHILDREN AND THEIR CAREGIVERS


Background: Pain can be a problem in a subgroup of juvenile idiopathic arthritis (JIA) patients even though in clinical routine it is at least partly be attributed to their pain coping strategy of catastrophizing [1]. In a chronic disease such as JIA, the quality of coping with pain is crucial. The importance of coping with pain is well recognized in children [2]. The understanding of the parental role in supporting the child in pain is growing [3]; yet measuring the precise mechanism of the parental role in supporting the child in pain is well recognized in children [2]. The understanding of the parental role in supporting the child in pain is growing [3]; yet measuring the precise mechanism of the parental role in supporting the child in pain is well recognized in children [2].

Objectives: The aim of this study was to develop a pain coping scale (PCSped) for assessing the parents’ coping strategies to their child’s pain and a shorter improved PCSped for children feasible for use in clinical practice.

Methods: The original pain coping questionnaire (PCQ) [4] has been validated in Japanese [5] resulting in a 38-item, eight-factor structured PCQ. The items in the new version of PCQ were reduced into twenty by an interdisciplinary team (mPCQped). A corresponding parent version (mPCQpar). The new version performed well in the content validity, the associations of the mPCQ-par, SSI, CDI, BDI and pain VAS were tested by Spearman’s correlation coefficient.

Results: The study was conducted in all five tertiary and four secondary hospitals evenly distributed throughout Finland. Of the 153 families invited to the study, 130 attended. The average (SD) age of the attending patients was 13.0 (2.3) years. Of the patients, 91 (70%) were girls. Several steps in the exploratory factor analyses preceded the factor analysis. The congruence validity, the associations of the mPCQ-par, SSI, CDI, BDI and pain VAS were tested by Spearman’s correlation coefficient.

Conclusion: In this study, we created a shorter pain coping scale for children (iPCSped) and a novel scale for caregivers (iPCSped). Both showed good validity and reliability.

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POS0338 COURSE OF UVEITIS IN CHILDREN WITH JUVENILE IDIOPATHIC ARTHRITIS: DATA FROM THE INCEPTION COHORT OF NEWLY DIAGNOSED PATIENTS WITH JIA (ICON-JIA) STUDY

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Background: Uveitis is a rare but serious complication of juvenile idiopathic arthritis (JIA) with a prevalence of up to 25% developing most frequently in young girls and patients positive for antinuclear antibodies (ANA). Untreated and uncontrolled uveitis may lead to vision-threatening complications and even blindness.

Objectives: The main objectives of the analyses were to determine the visual prognosis, uveitis complications and necessity of oculary surgery during the first five years of ocular disease. The likelihood of achieving an inflammation-free phase or even a remission without medication were investigated.

Methods: The Inception Cohort of Newly diagnosed patients with JIA (ICON-JIA) was initiated in 2010 in order to prospectively follow JIA patients up to 10 years after JIA disease onset. 953 Patients were assessed at enrollment, three-monthly during the first year, and six-monthly afterwards by a standardized physician’s patient’s and patient’s case report form including clinical parameters, treatment data and several laboratory parameters such as ESR, CRP or S100A12. Patients who developed uveitis underwent a regular ophthalmological assessment. The treatment ophthalmology team was created an additional questionnaire documenting the anterior chamber (AC) cell grade, current uveitis activity (UA) and UA during the previous three months, best corrected visual acuity (BCVA), uveitis-related complications, previous oculary surgery, current topical treatment