p<0.001) and had lower correlation with ΔESR (r=0.28, p=0.009). ΔSAA correlated with ΔNBP-VAS (r=0.260, p=0.016), but ESR and CRP did not correlate with this parameter. We also found statistically significant correlation between ΔSAA and ΔASDAS-VS (r=0.257, p=0.017), ΔASDAS-CRP (r=0.387, p<0.001), ΔBASFI (r=0.301, p=0.005). ΔCRP also showed significant correlation with ΔBASFI, but it was weaker than that observed with ΔSAA (r=0.230, p=0.033). There was no statistically significant correlation between ΔSAA levels and ΔMASES, although ΔCRP had a weak correlation (r=0.217, p=0.041). There was no significant correlation between neither ΔSAA, ΔCRP or ΔESR and the following parameters: ΔTBP-VAS, ΔPtGA-VAS, ΔPGA-VAS ΔBASDAI, ΔBASMI, ΔSPARCC, ΔTJC or ΔSJC.

Conclusions: This study suggests that SAA can be an useful tool in monitoring treatment with anti-TNFα and that could be introduced in clinical practice. However more studies, with larger sample sizes, should be undertaken to better assess this subject.

Disclosure of Interest: None declared

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THU0692 THE TURKISH VALIDATION AND RELIABILITY OF DISEASE-SPECIFIC, PATIENT REPORTED OUTCOME MEASURE IN RHEUMATOID ARTHRITIS: TR AIMS2-SF

T. Duruoz[1], C. Unal Ertekin[2], C. Sanal Top[2]. [1]*PM&R Department, Rheumatology Division;* [2]*PM&R Department, Marmara University, School of Medicine, Istanbul, Turkey*

Background: Rheumatoid arthritis (RA) can have a major impact on health related quality of life (HRQoL). The revised AIMS-2 is the main outcome measure that has been used for measuring HRQoL in patients with rheumatic diseases. Guillemin et al. developed a short form of AIMS-2 (AIMS-2 SF) (1) which is more practical and less time consuming compared to AIMS-2.

Objectives: The purpose of this study was to investigate validity and reliability of the Turkish version of AIMS2-SF (TR AIMS-2 SF).

Methods: Turkish AIMS2-SF was developed after translation and back-translation method. Culturally adapted version preserved 5 component-structure (upper limb function, lower limb function, affect, pain and social interaction) with 26 items according to the original article (1). Subjects fulfilling ACR/EULAR 2010 classification criteria for RA were consecutively enrolled into the study. Patients with malignancy, fibromyalgia syndrome and other systemic inflammatory diseases were excluded. Demographic data, the body mass index (BMI), severity of pain (VAS), disease duration (month) and other clinical features was evaluated. Reliability was investigated with test-retest reliability (intraclass correlation coefficient-ICC) and internal consistency (Cronbach's alpha). Spearman's rank correlation coefficient was used to evaluate the relation between quantitative parameters and the validity. Construct validity was assessed by the correlation of TR AIMS2-SF with other clinical parameters (age, disease duration, VAS pain, DAS-28) and functional parameters such as Nottingham Health Profile (NHP), Health Assessment Questionnaire (HAQ), Beck Depression Inventory (BDI), Duruoz Hand Index (DHI). Statistical analyses were performed with SPSS version 20 and a value of p<0.05 was considered as statistically significant.

Results: Sixty patients (6 males) were recruited into the study. The mean ± standart deviation (SD) of age (years) and disease duration (months) were 51.8±12.5 and 71.4±69.3, respectively. Mean scores of TR AIMS2-SF were; upper limb function 7.3±6.9, lower limb function 7.7±4.7, affect 7.4±3.2, pain 6±3.1, social interaction 4±2.3 and total score 35.5±16.6. The floor and ceiling effects of TR AIMS2-SF were 1.6 and 3.3, respectively. Both Cronbach's alpha and ICC were 0.83 indicating good reliability. There was significant correlation (rho, p value) with parameters that were directly related to HRQoL which were NHP subscales (energy level: 0.46, pain: 0.63, emotional reaction: 0.55, sleep 0.33, social interaction: 0.60, physical activity: 0.63; p<0.0001), HAQ (0.70, p<0.0001), BDI (0.54, p<0.0001), DHI (0.60, p<0.0001). Poor or not significant correlation was found with parameters that were not directly related to HRQoL such as age (-0.004, p=0.97), disease duration (0.21, p=0.09), vas pain (0.37, p<0.05); on the other hand, disease activity (DAS-28) correlated moderate (0.49, p<0.0001).

Conclusions: Turkish version of AIMS2-SF is a reliable and valid tool that can be used to evaluate the quality of life in RA. This is a feasible measure that can be used in daily practice easily.

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THU0693 FEASIBILITY AND RELIABILITY OF THE SPONDYLOARTHRITIS RESEARCH CONSORTIUM OF CANADA SACROILIAC JOINT INFLAMMATION SCORE FOR CHILDREN WITH SPONDYLOARTHRITIS

N.A. Chauvin[1], W.P. Maksymowych[2], R.G. Lambert[3], J.L. Jaremko[3], D.M. Biko[1], J. Paschke[4], T.G. Brandon[5], P.F. Weiss[5]. [1]*Radiology, Children's Hospital of Philadelphia, Philadelphia, United States;* [2]*Rheumatology;* [3]*Radiology, University of Alberta;* [4]*Care Arthritis, Alberta, Canada;* [5]*Rheumatology, Children's Hospital of Philadelphia, Philadelphia, United States*

Background: Clinical trials in children with pediatric spondyloarthritis and axial disease are lacking. In order to assess the effectiveness of medications we need an objective measure to quantify severity of inflammation in the pediatric sacroiliac joint.

Objectives: We evaluated the reliability and construct validity of the Spondyloarthritis Research Consortium of Canada (SPARCC) sacroiliac joint inflammation score (SIS) in children with suspected or confirmed juvenile spondyloarthritis (SpA).

Methods: The SIS divides the joint into quadrants and scores the presence, depth, and intensity of bone marrow edema (BME) on short tau inversion recovery (STIR) magnetic resonance imaging (MRI). Six consecutive semicoronal slices through the cartilaginous portion of the joint are scored for BME (total score 0–72). We developed a pediatric training module that included scoring instructions and examples of bright subchondral signal on STIR scans easily confused with inflammation (Figure). After reviewing the module, 6 readers (1 adult and 3 pediatric radiologists, 1 adult rheumatologist, and 1 pediatric rheumatologist), blinded to clinical details except age, scored 30 studies that included semicoronal T1-weighted and STIR sequences. Pain was recorded on a visual analogue scale (0–10). Disease activity was evaluated using the juvenile SpA disease activity (JSpADA) index (range 0–8). Inter-observer reliability was assessed using intraclass correlation (ICC). Correlation (convergent validity) of the mean SPARCC SIS developers' score with disease activity was tested using Spearman correlation. Discrimination was tested by comparing the mean SPARCC SIS developers' score between children with and without inflammatory back pain using the Mann-Whitney test.

Results: The SIS had face validity and was feasible to score in the 30 pediatric cases. 21 (70%) were male. Median age at the time of imaging was 15.5 years (IQR: 12.7–16.8). Median pain score and JSpADA index were 2 (IQR 0.5–6) and 2 (IQR: 0.5–3), respectively. Of the 180 scores submitted by 6 readers, 140 (78%) of the studies had a SIS ≥2. Median SIS was 14 (IQR: 3–29). ICCs for all readers (N=6), SPARCC developers (N=2), rheumatologists (N=2), and pediatric radiologists (N=3) were 0.63 (95% CI: 0.45–0.78), 0.89 (95% CI: 0.75–0.95), 0.43 (95% CI: -0.02–0.71), and 0.85 (95% CI: 0.72–0.92), respectively. SIS had low correlation with disease activity as measured by the JSpADA (r=-0.08) and C-reactive protein (r=0.14). SIS score did not discriminate between those with and without inflammatory back pain (p=0.16).

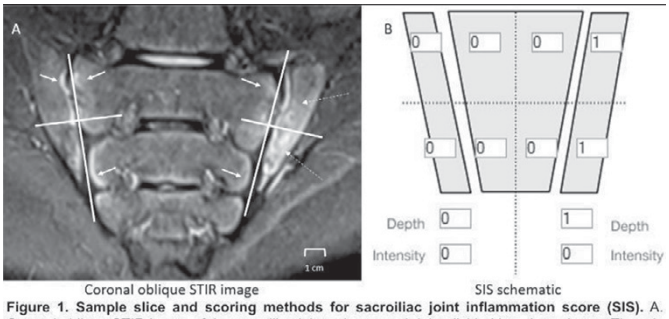

Figure 1. Sample slice and scoring methods for sacroiliac joint inflammation score (SIS). A. Coronal oblique STIR image of the sacroiliac joints shows each joint divided into 4 quadrants. There is normal bright subchondral signal along both sides of the right sacroiliac joint and along the periarticular region of the left sacrum (solid arrows) in this skeletally immature patient. On the left, there is abnormal signal consistent with bone marrow edema within periarticular region of the left ilium in both the upper and lower quadrants (dashed arrows). B. Scoring schematic demonstrates a "1" within the left iliac bone in both the upper and lower quadrants representing bone marrow edema. An additional score of "1" is given as the depth of the bone marrow edema extends >1cm from the articular surface. The patient received a total score of "3" for this image slice.

Conclusions: The SIS was feasible to score and had near excellent reliability, even with limited calibration. SIS did not have convergent validity with clinical measures of disease activity, highlighting that imaging and clinical evaluations provide complimentary but non-overlapping information. Responsiveness of the SIS should be evaluated in a prospective cohort of children who start biologic therapy.

Disclosure of Interest: None declared

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THU0694 EFFECTS OF ANTI-TNF THERAPY ON SOLUBILE UROKINASE PLASMINOGEN ACTIVATOR RECEPTOR (SUPAR) LEVELS IN ARTHRITIS

A. Pusztai, E. Végh, Á. Horváth, A. Hamar, S. Szántó, Z. Szekanecz, G. Szücs. *Department of Rheumatology, University of Debrecen, Faculty of Medicine, Debrecen, Hungary*

Background: The urokinase plasminogen activator receptor (uPAR) is expressed mainly on immune cells, smooth muscle cells and endothelial cells, favoring extracellular matrix degradation, cell adhesion, cell proliferation and regulates cell migration. The suPAR is the soluble form of the cell membrane-bound protein