AB1375

RELIABILITY AND VALIDITY OF TURKISH VERSION OF SHORT FORM OF THE SOCIAL ROLE PARTICIPATION QUESTIONNAIRE (S-SRPQ) IN PATIENTS WITH ANKYLOSING SPONDYLITIS

Y. Akyol¹, Y. Ulus¹, Y. Terzi², A. Bilgici¹, O. Kuru¹. ¹Physical Therapy and Rehabilitation; ²Statistics, Ondokuzmayis university, Samsun, Turkey

Background: Ankylosing spondylitis (AS) is a chronic inflammatory rheumatic disease with a usual onset in the third decade of life, when persons are committed to various social roles that adults fulfil.¹ When evaluating the outcomes of clinical care, social role participation is an increasingly important outcome, especially when considering diseases with substantial limitations in physical functioning such as inflammatory rheumatic diseases.² The Short Form of the Social Role Participation Questionnaire (s-SRPQ) is a questionnaire which was developed to assess effect of ankylosing spondylitis (AS) on participation.²

Objectives: This study aims to evaluate the reliability and validity of the Turkish version of the s-SRPQ in Turkish patients with AS.

Methods: The Turkish version of s-SRPQ questionnaire was obtained after a translation and back translation process. The study sample included 100 AS patients (59 males, 41 females; mean age 42.00±11.00 years; range 19 to 69 years). To assess the test-retest reliability of the Turkish s-SRPQ, the questionnaire was reapplied 15 days after the first interview (interclass correlation coefficient, ICC). Cronbach's alpha (α) was used to evaluate the internal consistency. The s-SRPQ was compared with Short Form-36 survey (SF-36), Ankylosing Spondylitis Quality of Life questionnaire (ASQoL), Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), Bath Ankylosing Spondylitis Functional Index (BASFI), and Satisfaction With Life Scale (SWLS) for convergent validity. The internal structure of s-SRPQ was examined by factor analysis.

Results: For s-SRPQ/experienced physical difficulties; the individual item ICC ranged from 0.78 to 1.00 and Cronbach's alpha value ranged from 0.88 to 1.00. For s-SRPQ/satisfaction with role performance; the individual item ICC ranged from 0.93 to 0.98 and Cronbach's alpha value ranged from 0.96 to 0.99. KMO values was determined as 0.90 and 0.89 in the s-SRPQ/experienced physical difficulties and s-SRPQ/satisfaction with role performance, respectively. Bartlett's test of sphericity had a p<0.001. The Turkish version of s-SRPQ/experienced physical difficulties scores negatively correlated with the SWLS and SF-36 sub-parameters scores (p<0.01). There were also strong positive correlations between s-SRPQ/experienced physical difficulties scores and BASDAI, BASFI, and ASQoL scores (p<0.01). The SRPQ/satisfaction with role performance scores positively correlated with the SWLS and SF-36 sub-parameters scores (p<0.01). There were also strong negative correlations between s-SRPQ/experienced physical difficulties scores and BASDAI, BASFI, and ASQoL scores (p<0.01).

Conclusions: Turkish version of s-SRPQ has good comprehensibility, internal consistency, and validity and is an adequate and useful instrument for the assessment of participation in Turkish patients with AS.

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AB1376

URINARY MONOCYTE CHEMOATTRACTANT PROTEIN 1 CANNOT DIFFERENTIATE BETWEEN HISTOLOGICAL CLASSES OF LUPUS NEPHRITIS

R.K. Gane¹, V. Dhir², A. Sandhu², A. Sharma², M. Rath³, R. Nada⁴, S. Sharma⁵, S.K. Sharma⁶. ¹Internal medicine, Post graduate institute of medical education and research, Chandigarh; ²Internal medicine; ³Department of Nephrology; ⁴Department of Histopathology; ⁵Department of Biochemistry, Post Graduate Institute of Medical Education and Research; ⁶Internal medicine, Post Graduate Medical Education and Research, Chandigarh, India

Background: Lupus Nephritis, one of the commonest manifestation of SLE, seen in 60% of adult SLE patients at some point of time, carries poor prognosis when compared to those with no renal involvement. The natural course of the LN has recurrent flares, necessitating the need for early detection and treatment. Despite being the gold standard in diagnosing Lupus nephritis and its severity, renal biopsy is an invasive procedure with potential complications, and difficult to repeat. Hence, a novel biomarker, reflecting the disease activity and severity is needed to predict flare. Monocyte chemoattractant Protein 1, a chemokine

produced locally during Lupus Nephritis flare, was shown in many previous studies as a promising biomarker

Objectives: We studied the role of Urinary MCP-1 as a biomarker of disease activity in LN and compare its value among different histological classes of Lupus nephritis

Methods: This is a case-control study conducted at a tertiary care centre in North India from July 2016 to December 2017. Cases were those patients undergoing renal biopsy satisfying the inclusion criteria set for SLE (n=36). Controls were patients of SLE without active LN [Control I-prior LN (n=11) and Control II-never had LN (n=15)]. Urinary MCP-1 measurement was done using Sandwich ELISA kit

Results: The mean age in cases was 31.1±10.2 years and mean age in control-I was 34.6±8.0 and in control II was 36.3±10.4. Urinary MCP-1 values in cases (1214±1467.1 pg/mg) was significantly higher compared to Controls (184.5±186.8). However, no significant difference was observed between Control I (170.5±150.8) and Control II (194±214). Urinary MCP-1 levels show significant correlation when compared with classical disease markers like 24 hour proteinuria, 24 hour PCR, Spot PCR and SLEDAI. Cut off value (339 pg/mg, p<0.001) obtained from ROC curve has sensitivity and specificity of 80% and 92% respectively. However, there was no significant difference of Urinary MCP-1 levels was observed among different classes of LN (p=0.593). ROC curve comparison of urinary MCP-1 (AUC=0.879) with 24 hour urine protein to creatinine ratio (AUC=0.964) and spot urine protein to creatinine ratio (AUC=0.872) showed that it is not a better marker of disease activity than both of them. Urinary MCP-1 levels didn't show significant correlation with Renal activity index calculated on renal biopsy.

Conclusions: In this study we found higher Urinary MCP-1 levels in active LN compared to Inactive LN and its level was correlated well with the presently used disease markers. However there was no significant difference among different histological classes of LN.

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AB1377

IS THE PATIENT GLOBAL HEALTH ASSESSMENT RELIABLE IN JUVENILE IDIOPATHIC ARTHRITIS (JIA)?

R. Trachtman, C.M. Wang, J. Szymonifka, K.B. Onel. *Hospital for Special Surgery/ Weill Cornell Medicine, New York, USA*

Background: JIA is a chronic autoimmune disease that poses many challenges. There is increasing recognition of the importance of patient-reported outcomes (PROs) and newer PROs are being developed and more widely utilised both in clinical care and in research. However, their performance and reliability remain unclear.

Objectives: This study seeks to evaluate:¹ performance of the patient global health assessment (PGA) compared to standard disease activity measures in children with JIA,² correlations of the PGA with socioeconomic status (SES) in JIA, and³ relationship between PGA and physician global health assessment in JIA.

Methods: A convenience sample of patients with JIA (n=47) aged 2–18 were recruited from a single centre. Patients aged ≥10 years completed the questionnaire, and parents of patients aged 2–9 completed a proxy questionnaire for their child. Correlations between¹ the PGA and disease activity, as measured by the Juvenile Disease Activity Score-71 (JADAS-71),² the PGA and physician global health assessment, and³ the physician global health assessment and the JADAS-71 were evaluated using Spearman correlation coefficients. PGAs were compared by age, sex, insurance status, race, and ethnicity; and differences between

PGA and physician global health assessments were compared using Wilcoxon rank-sum tests.

Results: 16 parents and 31 patients completed the assessments (table 1). There was a moderate correlation between PGA and JADAS-71 ($r=0.503$, $p<0.001$), and PGA and physician global health assessments ($r=0.503$, $p=0.002$). There was a stronger correlation between physician global health assessments and JADAS-71. PGA median scores and IQRs appeared to be higher among patients with Medicaid insurance, non-white race, and Hispanic ethnicity, with the greatest difference seen in the category of race (Table 2). There were no differences between patient and physician assessments across all groups except among patients with Medicaid (difference median=-1.25) and Hispanic patients (difference median=2).

Abstract AB1377 – Table 1. Patient Characteristics

	Patients and Parents (n=47)	Patients (n=31)	Parents (n=16)
Age, years (median, IQ range)	12.4 [8.6–15.0]	14.2 [12.4–15.8]	4.3 [3.3–9.0]
Male Gender	17 (36.2%)	14 (45.2%)	3 (18.8%)
Race			
Caucasian/White	38 (80.9%)	24 (77.4%)	14 (87.5%)
Asian	3 (6.4%)	3 (9.7%)	0 (0.0%)
Other	6 (12.7%)	4 (12.9%)	2 (12.5%)
Hispanic Ethnicity	8 (17.0%)	5 (16.1%)	3 (18.8%)
Insurance			
Medicaid	8 (17.0%)	4 (12.9%)	4 (25.0%)
Private	39 (83.0%)	27 (87.1%)	12 (75.0%)

Abstract AB1377 – Table 2. Comparison of Patient Global Assessments by age, sex, insurance status, race and ethnicity

	Patient global median [IQR]	P-value
Age	2 [0–5]	0.892
Patient completed	2 [0.05–4.5]	
Parent completed		
Sex	2 [0–5]	0.679
Male	2 [0–4]	
Female		
Insurance	2.5 [1, 5]	0.313
Medicaid	2 [0–4]	
Private		
Race	1.5 [0–4]	0.266
White	4 [2–5]	
Non-white		
Ethnicity	2.5 [2.5–5]	0.134
Hispanic	1 [0–4]	
Non-Hispanic		

Conclusions: Our results demonstrate that physician global health assessment had a stronger correlation with standard disease activity measures than the PGA. These scores were higher in patients who were non-White race, Hispanic, and had Medicaid insurance; however, these were not statistically significant. These data indicate that the PGA is fairly stable across groups, and can be used reliably for disease monitoring.

Disclosure of Interest: None declared

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AB1378 CLINICAL COMPARISON OF NEW CRITERIA FOR INFLAMMATORY MYOPATHY IN A COLOMBIAN COHORT

R. Fuentes¹, D. Gil-Calderon¹, M. Cañola¹, J.C. Diaz-Coronado², A. Rojas-Villarraga², D. Hernandez-Parra², P. Perez-Estrada², J.C. Salazar-Urbe³, R. Pineda-Tamayo². ¹Rheumatology; ²Clinical Research, Artmedica; ³National University of Colombia, Medellín, Colombia

Background: Idiopathic inflammatory Myopathies are a group of diseases characterised by weakness due to muscle inflammation, with or without dermatological involvement, that classically includes pathognomonic findings like Gottron sign. There have been different criteria used to classify these diseases, being Peter and Bohan the most used in time, but recently the ARC/EULAR group proposed a new way to approach the classification.

Objectives: To compare ACR/EULAR 2017 versus Peter and Bohan criteria for Idiopathic Inflammatory Myopathy in a Colombian cohort

Methods: A cross-section retrospective research was done with data collected between 2014 and 2017 from a population diagnosed with Idiopathic Myopathy according to Peter and Bohan criteria and followed up for at least six months. The new ACR/EULAR criteria were applied to each individual using the online tool

(<http://www.imm.ki.se/biosstatistics/calculators/iim>). Both sets of criteria were compared using Cohen's kappa coefficient and concordance was evaluated.

Results: Data of 149 patients were obtained. Anti-Jo1 results were not available for 75% of the patients. Biopsy was available in 44.3% of patients. Biopsy results were compatible with inflammatory myopathy in 66.7% and non-compatible in 33.3%. According to Peter and Bohan criteria the diagnosis of idiopathic inflammatory myopathy was definite in 63.1% of the patients, and probable in 27.5%. Using ACR/EULAR 2017 criteria instead the diagnosis was definite in 63.1%, probable 10.1% and non-possible in 20.8%. According to the new criteria, 31 patients had polymyositis, 47 dermatomyositis, 4 amyopathic dermatomyositis, 35 juvenile myositis and 1 inclusion body myositis. The concordance analysis between the two sets of criteria showed agreement of 54% (kappa 0.22 $p<0.001$) in the whole group, 59% (kappa 0.21 $p<0.001$) in adults, 32% (kappa 0.18 $p=0.05$) in children, 44% (kappa 0.05 $p=0.3$) in polymyositis and 42% (kappa 0.16 $p=0.1$) in dermatomyositis.

Conclusions: Data of 149 patients were obtained. Anti-Jo1 results were not available for 75% of the patients. Biopsy was available in 44.3% of patients. Biopsy results were compatible with inflammatory myopathy in 66.7% and non-compatible in 33.3%. According to Peter and Bohan criteria the diagnosis of idiopathic inflammatory myopathy was definite in 63.1% of the patients, and probable in 27.5%. Using ACR/EULAR 2017 criteria instead the diagnosis was definite in 63.1%, probable 10.1% and non-possible in 20.8%. According to the new criteria, 31 patients had polymyositis, 47 dermatomyositis, 4 amyopathic dermatomyositis, 35 juvenile myositis and 1 inclusion body myositis. The concordance analysis between the two sets of criteria showed agreement of 54% (kappa 0.22 $p<0.001$) in the whole group, 59% (kappa 0.21 $p<0.001$) in adults, 32% (kappa 0.18 $p=0.05$) in children, 44% (kappa 0.05 $p=0.3$) in polymyositis and 42% (kappa 0.16 $p=0.1$) in dermatomyositis.

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AB1379 POTENTIAL DIAGNOSTIC SERUM IMMUNOLOGICAL MARKER PANEL IN PRIMARY AND SECONDARY OSTEOARTHRITIS IN SRI LANKAN PATIENTS

S. Rankotgedera¹, I. Atukorala², D. Munidas³, L. Wijayarathne⁴, P. Udagama¹.

¹Department of Zoology and Environment Sciences, University of Colombo, Sri Lanka, Colombo 3; ²Department of Clinical Medicine, University of Colombo, Sri Lanka, Colombo 8; ³Rheumatology and Rehabilitation Hospital, Ragama; ⁴Department of Zoology and Environment Sciences, Nawaloka Hospital PLC, Colombo 2, Sri Lanka

Background: Osteoarthritis (OA) is commonly perceived as a degenerative joint disease but it is now established that inflammation contributes to OA. Though OA is categorised into primary and secondary osteoarthritis, most clinicians manage patients of both categories in a similar manner.

Objectives: The current study aimed to identify potential diagnostic markers of primary and secondary OA. Two cohorts of Sri Lankan patients, one with primary OA and another with secondary OA were assessed for a selected panel of immunologic mediators i.e. cytokines (TNF- α , IL-1 β , IL-6, IL-10) and nitric oxide derivatives (NOx).

Methods: A case control study was conducted with 40 OA patients (Primary, n=30; Secondary, n=10), and 60 age and gender matched controls (normal healthy, n=30; Systemic Lupus Erythematosus (SLE) disease control, n=30). The socioeconomic and demographic data were accrued via an interviewer administered questionnaire. Sandwich ELISAs assayed serum cytokine levels, while the 'Griess assay' measured serum NOx levels.

Results: In comparison to healthy controls, OA patients showed significantly higher serum concentrations of all five analytes tested ($p<0.05$). Patients with primary OA had significantly higher levels of TNF- α and IL-1 β and lower level of IL-6 in serum compared to disease controls (SLE) ($p<0.05$). Secondary OA patients exhibited a significant increase in serum TNF- α and IL-1 β and lower serum IL-10 levels compared to disease controls ($p<0.05$). In the two test groups, the serum levels of TNF- α and IL-6 were significantly elevated in secondary OA patients ($p<0.05$). The NOx concentrations between the two test groups was not significantly different. The Th1:Th2 cytokine ratio (TNF- α :IL-10) was significantly higher in secondary OA compared with primary OA ($p<0.05$).

The Receiver operating characteristic (ROC) curves identified TNF- α and IL-10 as potential diagnostic biomarkers of both primary OA and secondary OA compared with healthy controls. IL-1 β and IL-6 may be used specifically as diagnostic