POS1071

DETERMINATION OF THE RELIABILITY AND VALIDITY OF THE BETY-BIOPSYCHOSOCIAL QUESTIONNAIRE IN PATIENTS WITH A DIAGNOSIS OF PSORIATIC ARTHRITIS

S. Bulut¹, E. Ünal², J. Karakaya³, U. Kalyoncu⁴. ¹Hacettepe University, Faculty of Physical Therapy and Rehabilitation, Ankara, Turkey; ²Hacettepe University, Faculty of Physical Therapy and Rehabilitation, Ankara, Turkey; ³Hacettepe University, Faculty of Medicine, Department of Basic Medical Sciences, Ankara, Turkey; ⁴Hacettepe University, Faculty of Medicine, Department of Internal Medical Sciences, Ankara, Turkey

Background: In the literature, there is a lack of questionnaires, which is evaluate patients with psoriatic arthritis (PsA) from a biopsychosocial perspective.

Objectives: This study was planned to examine the reliability and validity of the BETY- Biopsychosocial Questionnaire (BQ) in individuals diagnosed with PsA.

Methods: Test-retest method was used to examine the reliability of the BETY-BQ. In comparing the reliability of test-retest results, intraclass coefficient (ICC) was checked. For the internal consistency analysis of the BETY-BQ, the total score of the responses given to the first filled scale was calculated and the Cronbach's Alpha coefficient was found. Psoriatic Arthritis Quality of Life Questionnaire (PsAQoL), Health Assessment Questionnaire (HAQ), Hospital Anxiety and Depression Scale (HADS) and Short Form-36 (SF-36) were used in the validity study of 150 individuals with PsA included in the study.

Results: Test-retest method and intraclass coefficient were examined for reliability analysis (for 30 patients). The correlation ($r = 0.844$, $p < 0.001$) of the answers given to the BETY-BQ by individuals with 30 PsA after one week interval was very high. While the ICC coefficient (0.915, $p < 0.001$) showed excellent reliability. The Cronbach's Alpha coefficient (0.940) was examined for internal consistency and the internal consistency of the scale was also found to be excellent. As a result of statistical analysis, the correlation between the scales used and the BETY-BQ was found between $r = -0.432$ and 0.807 ($p < 0.001$).

Conclusion: With this study, it was concluded that the BETY-BQ is a reliable and valid assessment tool in individuals diagnosed with PsA, and is also a biopsychosocial tool that can be used to evaluate individuals with PsA.

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ASSOCIATION OF NAIL PSORIASIS WITH WORSE DISEASE OUTCOMES IN PSORIATIC ARTHRITIS PATIENTS. DATA FROM CLINICAL PRACTICE

E. Gubar¹, Y. Korsakova¹, E. Loginova¹, S. Glukhova², T. Korotaeva¹, E. Nasonov^{1,3}, A. Lila^{1,4}, N. Kuznetsova⁵, I. Umnova⁶, V. Sorotskaya⁷, I. Patrikeeva⁸. ¹V.A. Nasonova Research Institute of Rheumatology, Spondyloarthritis and psoriatic arthritis, Moscow, Russian Federation; ²V.A. Nasonova Research Institute of Rheumatology, Medical and Social Problems in Rheumatology, Moscow, Russian Federation; ³I.M. Sechenov First Moscow State Medical University, Rheumatology, Moscow, Russian Federation; ⁴Russian Medical Academy of Continuing Professional Education, Rheumatology, Moscow, Russian Federation; ⁵Municipal Autonomous Institution "City Clinical Hospital No. 40", Rheumatology, Yekaterinburg, Russian Federation; ⁶Omsk region "Regional clinical hospital", Rheumatology, Omsk, Russian Federation; ⁷Medical Institute of the Tula State University, Rheumatology, Tula, Russian Federation; ⁸Tyumen Regional Clinical Hospital №1, Rheumatology, Tyumen, Russian Federation

Background: Limited data are available regarding the burden of nail disease in psoriatic arthritis (PsA). The latest data show that nail involvement in PsA patients (pts) is associated with significantly more severe disease status (1).

Objectives: To analyze, in clinical practice, the association of nail psoriasis with disease activity, quality of life, and work productivity in PsA pts.

Methods: 588 pts (M/F=277 /311) with PsA according to CASPAR criteria were included in the study. Data were collected from 43 rheumatology clinics from different regions of the Russian Federation. Pts' age 48.6 ± 0.5 years (yrs), disease duration 7.0 ± 0.3 yrs. Pts underwent standard clinical examination of PsA activity. Pts were split into two groups (gr.): those with nail psoriasis – gr.1, and those without it – gr.2. Demographics, disease activity, quality of life, and work productivity were compared between pts with and without nail psoriasis using Pearson's chi-square test and Mann–Whitney U test.

Results: Gr.1 includes 312 (53.1%) cases, gr.2 – 276 (46.9%) cases. More pts in gr.1 were males (51.9% vs 44.1%, $p=0.013$), disabled at work (37.20% vs

26.40%, $p=0.000$), chronic smokers (18.9% vs 8.7%, $p=0.000$) and with axial PsA disease signs according to physician (35.0% vs 26.4%, $p=0.025$) compared to pts in gr.2. Pts in gr.1 had higher tender and swollen joint counts: 8 [4-15] vs 5 [2-12] ($p=0.002$) and 5 [1-9] vs 2 [0-7] ($p=0.003$) respectively. Gr.1 pts had higher disease activity measured by DAPSA 25 [15-39] vs 20 [12-33] ($p=0.001$), higher frequency of dactylitis (24.4% vs 16.7% $p=0.022$) and heel enthesitis (17.0% vs 10.1% $p=0.016$) respectively, higher frequency of erosive radiographic arthritis of feet (45.0% vs 31.2% $p=0.003$) compared to gr.2 pts. Pts in gr.1 had worse skin psoriasis measured by Psoriasis Area Severity Index – 6 [2-14] vs 3 [1-6] ($p=0.000$). Less pts in gr.1 than in gr.2 (27.0% vs 52.0% $p=0.004$) achieved minimal disease activity (MDA). Pts' reported outcomes (PRO's) in gr.1 were worse than in gr.2 in regard to reduced health-related quality of life according to PsAID (4.9 ± 2.3 vs 4.0 ± 2.3 , $p=0.040$) and to EQ-5D (0.56 ± 0.19 vs 0.64 ± 0.21 , $p=0.024$) questionnaires, overall work impairment (0.0 [0.0-0.3] vs 0.0 [0.0-0.2], $p=0.034$) and overall activity impairment (0.4 [0.1-0.7] vs 0.3 [0.0-0.5], $p=0.006$) according to WPAI.

Conclusion: Nail involvement in PsA pts is associated with male gender and axial disease. PsA pts with nail involvement are more often disabled, more often are chronic smokers, have significantly worse disease status as measured by disease activity; they are more likely to have more severe (erosive) peripheral arthritis of feet, higher frequency of heel enthesitis and dactylitis, higher psoriasis disease severity, lower frequency of MDA achievement, and worse quality of life and work productivity according to PRO's. Detection of nail involvement is critical for choice of treatment approach and better outcomes.

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POS1073

AXIAL PSORIATIC ARTHRITIS AND ANKYLOSING SPONDYLITIS. SAME OR DIFFERENT? A REAL-WORLD STUDY WITH EMPHASIS ON COMORBIDITIES

G. E. Fragoulis¹, M. Pappa¹, G. Evangelatos¹, A. Iliopoulos², P. Sfrikakis¹, M. Tektonidou¹. ¹National and Kapodistrian University of Athens, First Department of Propaedeutic Internal Medicine, Joint Rheumatology Program, Athens, Greece; ²417 Army Shared Fund Hospital "NIMTS", Department of Rheumatology, Athens, Greece

Background: Axial involvement affects 25-70% of psoriatic arthritis (PsA) patients, depending on the criteria used for its definition. Efforts are underway to clarify the similarities and differences between axial-PsA and ankylosing spondylitis (AS).

Objectives: We aimed to compare, in a real-world setting, axial-PsA and AS, in terms of demographic, radiologic and clinical (musculoskeletal and extra-articular) characteristics, with a focus on comorbidities.

Methods: All AS (New York criteria, $n=128$) and PsA patients (CASPAR criteria, $n=78$) with axial involvement who were regularly followed-up in the outpatients' rheumatology clinics from two tertiary hospitals (December 2018-July 2020) were included. Axial-PsA was defined when both of the following were ever present: inflammatory axial symptoms and radiologic findings in X-ray or MRI of the sacroiliac joints or the spine. The following findings were considered: sacroiliitis (unilateral $\geq$ grade 3 or bilateral $\geq$ grade 2), corner lesions or squaring in the vertebrae, syndesmophytes (marginal or para-marginal) and facet joints arthritis.

Demographic, radiologic and clinical characteristics including comorbidities were compared between AS and axial-PsA. For comorbidities (Major Adverse Cardiovascular Events [MACE: combined coronary disease and cerebrovascular accidents], hypertension, diabetes mellitus, dyslipidemia, depression, osteoporosis, and malignancies), adjustments were made for relevant confounders as follows: MACE were adjusted for: age, gender, smoking, hypertension, dyslipidemia, disease duration, DM and non-steroidal anti-inflammatory drugs [NSAIDs] use; depression for: age, gender and disease duration; malignancy for: age, gender, disease duration; hypertension for: age, sex, BMI, NSAIDs use, smoking for; DM: age, sex, BMI, glucocorticoids treatment; osteoporosis for: age, sex, glucocorticoids treatment. Statistical significance is considered for p-values less than 0.05 and 0.1 in univariate and multivariate analyses, respectively.

Results: AS patients were younger ($p=0.05$) and were diagnosed at a younger age ($p=0.002$), more frequently of male gender ($p=0.04$), had lower BMI ($p=0.006$) and they were more frequently HLA-B27-positive ($p=0.006$). In AS patients, peripheral arthritis, dactylitis and nail involvement were less common ($p=0.001$ for all), in contrast to eye ($p=0.001$) and bowel involvement ($p=0.004$). Frequency of radiologic abnormalities in the spine was similar between the two groups while sacroiliitis was more often bilateral in AS and unilateral in axial-PsA ($p<0.001$ for both). Comorbidities, including MACE, were comparable between AS and axial-PsA, apart from depression which was more frequent in axial-PsA (Table 1. next page).

Table 1. Comorbidities. Comparison between axial-PsA and AS. OR: odds ratio, MACE: Major cardiovascular events. * adjustments are reported in the text

Comorbidities	axial-PsA (n=79)	AS (n=129)	Crude OR (95%CI)	Adjusted OR (95%CI)	p-value
MACE* n (%)	4 (5.1)	6 (4.6)	0.91 (0.25-3.34)	1.73 (0.32-9.34)	0.526
Dyslipidemia n (%)	37 (46.8)	45 (34.9)	0.61 (0.34-1.07)	NA	0.108
Hypertension* n (%)	27 (34.2)	24 (18.6)	0.44 (0.23-0.83)	1.11 (0.38-3.21)	0.843
Diabetes mellitus* n (%)	12 (15.2)	10 (7.7)	0.47 (0.19-1.14)	1.65 (0.43-6.29)	0.463
Depression* n (%)	19 (24.1)	16 (12.4)	0.44 (0.21-0.93)	0.48 (0.22-1.07)	0.07
Osteoporosis* n (%)	3 (3.8)	10 (7.7)	2.13 (0.57-7.98)	2.40 (0.56-10.18)	0.235
Malignancies* n (%)	3 (3.8)	3 (2.3)	0.60 (0.12-3.06)	0.87 (0.16-4.70)	0.870

Conclusion: AS and axial-PsA have certain clinical and radiologic differences. Comorbidities were comparable, while depression was more common in axial-PsA.

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POS1074 CARDIOVASCULAR RISK FACTORS IN A MEXICAN MESTIZO PATIENTS WITH PSORIATIC ARTHRITIS

S. Lugo-Perez¹, I. J. Colunga-Pedraza², J. R. Azpiri-López¹, D. Á. Galarza-Delgado², A. B. Rodríguez-Romero², N. Guajardo-Jauregui², D. E. Flores Alvarado², A. Cárdenas², O. Ilizaliturri Guerra². ¹Hospital Universitario "Dr. José Eleuterio González", Universidad Autónoma de Nuevo León, Cardiology, Monterrey, Mexico; ²Hospital Universitario "Dr. José Eleuterio González", Universidad Autónoma de Nuevo León, Rheumatology, Monterrey, Mexico

Background: Psoriatic Arthritis (PsA) is a chronic inflammatory arthropathy that affects 14%-30% of patients with skin and/or nail psoriasis. Patients with psoriatic arthritis (PsA) have a higher prevalence of traditional cardiovascular (CV) risk factors and an increased risk of developing cardiovascular diseases (1), such as acute myocardial infarction, cerebrovascular accident, peripheral vascular disease and heart failure. Despite the evidence patients with PsA are inadequately screened and undertreated for CV risk factors (CVRF), highlighting a gap in preventive medicine to adjust cardiovascular therapies(2).

Objectives: The aim of the study is to determine the main CVRF in Mexican Mestizo patients with a diagnosis of PsA and to compare it with healthy controls. Additionally, to assess the impact of the diagnosis of PsA on the presence on these cardiovascular comorbidities.

Methods: A cross-sectional, observational, and comparative study of ninety-six patients with PsA between 40-75 years who fulfilled CASPAR criteria 2006. Patients were matched by age and gender with non-PsA subjects. A medical history and physical exam were performed, also a blood sample was collected during the first visit. Chi square and Student's t test were used for comparisons between groups. A binary logistic regression was performed including the traditional CVRF (type 2 diabetes mellitus, hypertension, obesity, and active smoking), age and the diagnosis of PsA. A p value <0.05 was considered statistically significant.

Results: There were 58 (60.4%) women in each group with a mean of 53 years. Patients with PsA showed a higher prevalence of hypertension (HTN) compared to healthy controls (35.4% vs 19.8%, respectively, $p = 0.015$). Additionally, there was a significant difference in the diagnosis of dyslipidemia (42.7% vs 22.9%, $p = 0.003$). We found no statistically difference between the two groups in type 2 diabetes mellitus, active smoking and, obesity (Table 1. below).

Table 1. Comparison of cardiovascular risk factors between Psoriatic Arthritis and controls.

	PsA (n=96)	Control (n=96)	p
Age, years ± SD	53.19 ± 11.13	53.34 ± 8.4	NS
Women, n (%)	58 (60.4)	58 (60.4)	NS
T2DM, n (%)	21 (21.9)	12 (12.5)	NS
HTN, n (%)	34 (35.4)	19 (19.8)	0.015
Active smoking, n (%)	21 (21.9)	20 (20.8)	NS
Dyslipidemia, n (%)	41 (42.7)	22 (22.9)	0.003
Obesity, n (%)	36 (37.5)	25 (26.0)	NS

NS, no significant; SD, standard deviation; HTN, hypertension; T2DM, type2 diabetes mellitus.

The binary logistic regression showed that the diagnosis of PsA (OR 2.235, 95% CI 1.141-4.375, $p = 0.019$) and active smoking (OR 2.429 95%, CI 1.137-5.186, $p = 0.022$) are independent risk factors for the presence of dyslipidemia.

Conclusion: Patients with PsA have a higher prevalence of HTN and dyslipidemia. The diagnosis of PsA seems to be an independent factor for the presence of dyslipidemia. It is important for rheumatologists to identify those patients who could benefit from adjust antirheumatic and cardiovascular therapies due to their impact on morbidity and mortality.

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Figure 1. Binary logistic regression for the presence of dyslipidemia.

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POS1075 PREDICTIVE FACTORS ASSOCIATED WITH DEVELOPMENT OF PSORIATIC ARTHRITIS IN PATIENTS WITH UNDERLYING PSORIASIS

W. Y. Loo¹, F. Yahya¹, W. H. Han², N. A. A. Fahem², S. S. Yong², L. S. L. Pok¹, Z. Kwan², Y. C. Tee¹. ¹University of Malaya, Rheumatology Unit, Medicine, KUALA LUMPUR, Malaysia; ²University of Malaya, Dermatology Unit, Medicine, KUALA LUMPUR, Malaysia

Background: Psoriatic arthritis (PsA) is a chronic inflammatory condition in which a delayed diagnosis will have health impacts including physical and psychological aspects. Thus, identification of risk factors and early diagnosis are crucial in clinical practice. In Malaysia, 13.7% of patients with underlying psoriasis develop PsA¹. However, there are limited data on the risk factors in developing PsA in these patients, not just in Malaysia but also in the Southeast Asia region.

Objectives: To analyse sex, clinical features, comorbidities in patients with psoriasis and PsA, and the predictive factors of developing PsA in patients with underlying psoriasis.

Methods: A retrospective study was carried out involving patients with a physician-verified diagnosis of psoriasis who were attending the dermatology and/or rheumatology clinics at the University of Malaya Medical Centre, Kuala Lumpur between 2015 to 2020. Data were retrieved from electronic medical records. Data collected included sex, age, body mass index (BMI), duration of psoriasis, socio-demographics, comorbidities, body area affected, severity of skin involvement, presence of nail involvement and systemic therapy used in treating psoriasis. Systemic therapy is defined as methotrexate, sulfasalazine and/or acitretin used before diagnosis of PsA. Patients with psoriasis who developed PsA had information collected on tender joint count, swollen joint count and erythrocyte sedimentation rate (ESR) at their initial visit to the rheumatologist. Logistic regression analyses were performed to identify the possible risk factors of developing PsA.

Results: A total of 330 psoriasis patients which included 54.5% male and a mean age of 53 (standard deviation, SD 18.85) years were included. Eighty-three (25.0%) patients were diagnosed with PsA. Among patients with PsA, 39.8% were males with a mean age of 54 (SD 15.79) years. Majority of the PsA patients were ethnic Malay (45.8%), followed by 28.9% Chinese and 25.3% Indian. The median duration of developing PsA was at 36 (IQR 3.5 - 114) months after the