



<https://doi.org/10.47660/CBR.2020.17423>

RELATIONSHIP OF THE PSORIATIC ARTHRITIS IMPACT OF DISEASE SCORE (PSAID-12) WITH RADIOLOGICAL DAMAGE AND DELAY IN THE DIAGNOSIS OF PSORIATIC ARTHRITIS: A MULTICENTER STUDY

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BACKGROUND

Psoriatic arthritis (PsA) determines a high negative impact on patients' quality of life. In this context, it is well recognized that a 6-month delay from the onset of symptoms to the diagnosis of PsA contributes to the development of peripheral joint erosions radiographic and worsening of long-term physical function, as measured by the worst scores on the Health Assessment Questionnaire (HAQ)¹. Currently, in addition to HAQ, Psoriatic Arthritis Impact of Disease (PsAID-12) is available - an instrument that specifically evaluates the impact of PsA for the patient in practice clinic². The objective was to study the association of PsAID-12 with diagnostic delay, HAQ and with the presence of radiographic changes in patients with PsA.

MATERIALS AND METHODS

Multicenter cross-sectional study, which recruited 160 patients, who met the Classification Criteria for Psoriatic Arthritis (CASPAR), in six Brazilian rheumatology centers, from July 2017-April 2018. The duration of PsA and the findings radiological were collected in the medical record. An interval greater than one year between the onset of symptoms and the diagnosis of PsA was considered delayed diagnosis. Descriptive statistics were used to describe sociodemographic/clinical characteristics. For the other correlations, Spearman's coefficient and Mann-Whitney tests were used. The level of significance adopted was 5% ($p < 0.05$). All participants signed the Free and Informed Consent Term.

RESULTS

Of the 160 patients included, 50% were female with a mean age (SD) of 54.0 ± 11.2 years. Regarding psoriatic disease, the median duration (P25-P75) of PsA was 8 (5-14) years and 72% of patients had some related radiological alteration (Table 1). There was a significant association between PsAID-12 and HAQ ($p < 0.001$) (Table 2). However, both the delay in diagnosis and the presence of radiographic damage were not significantly associated with the total score of PsAID-12 and its domains (Tables 3 and 4), respectively.

Table 1. Sociodemographic and clinical characteristics of study participants.

Variables	n = 160
Age (years) - mean \pm SD	54.0 \pm 11.2
Gender - n (%)	
Female	80 (50.0)
Male	80 (50.0)
Duration of cutaneous disease/psoriasis (years) - median (P25-P75)	18 (8-27)
Time of PsA symptoms (years) - median (P25-P75)	8 (5-14)
Time between symptom onset and diagnosis (years) - median (P25-P75)	1 (0-3)
Radiographic changed - n (%)	115 (71.9)
Type of PsA involvement - n (%)	
Peripheral	109 (68.1)
Axial	3 (1.9)
Mixed	48 (30.0)

Table 2. Association of PsAID-12 with HAQ (Spearman correlation coefficient).

Variable	PsAID-12
HAQ	0.657***

***p < 0.001. HAQ – Health Assessment Questionnaire.

Table 3. Comparison of PsAID-12 domains with delayed diagnosis.

Domains PsAID-12	No diagnostic delay (≤ 1 year) (n = 103; 64.4%)	With diagnostic delay (> 1 year) (n = 57; 35.6%)	p
	Md (P25–P75)	Md (P25–P75)	
Pains	4 (3–8)	5 (3–8)	0.307
Fatigue/tiredness	4 (2–7)	4 (2–7)	0.488
Skin problems	3 (1–6)	2 (1–6)	0.421
Work and/or leisure activity	4 (0–7)	5 (1–7.5)	0.461
Physical ability	4 (1–8)	5 (1.5–7.5)	0.409
Discomfort	4 (1–7)	4 (2–7)	0.524
Sleep disturbance	3 (0–6)	3 (0–6)	0.816
Dealing with the disease	3 (0–5)	3 (1–6)	0.656
Anxiety/fear/uncertainty	3 (0–7)	4 (1–8)	0.307
Embarrassment and/or shame	1 (0–4)	2 (0–6)	0.194
Social participation	1 (0–5)	1 (0–5)	0.671
Depression	1 (0–5)	1 (0–7)	0.395
Total	3.8 (1.6–5.8)	3.7 (1.9–6.2)	0.465

Table 4. Comparison of PsAID-12 domains according to radiographic alteration.

Domains PsAID-12	Unchanged (n = 25)	With change (n = 115)	p
	Md (P25–P75)	Md (P25–P75)	
Pains	3 (1–6)	5 (3–8)	0.052
Fatigue/tiredness	4 (1–7)	5 (2–7)	0.260
Skin problems	2 (0–5.5)	3 (1–6)	0.225
Work and/or leisure activity	3 (0–5)	4 (1–7)	0.169
Physical ability	4 (0–7)	5 (2–8)	0.241
Discomfort	3 (0–6)	4 (2–7)	0.204
Sleep disturbance	2 (0–5.5)	3 (0–6)	0.388
Dealing with the disease	1 (0–5.5)	4 (1–5)	0.114
Anxiety/fear/uncertainty	3 (0–7)	4 (1–8)	0.314
Embarrassment and/or shame	0 (0–3)	2 (0–5)	0.398
Social participation	0 (0–2.5)	1 (0–5)	0.320
Depression	1 (0–4.5)	2 (0–6)	0.533
Total	2,3 (0.8–5.9)	3,8 (1.9–6.1)	0.116

CONCLUSION

In our experience, the PsAID-12 score correlated with HAQ. However, from the perspective of the patient measured by PsAID-12, the impact of PsA was not significantly different when there was a delay in diagnosis and when there was established radiographic damage. These results favor the interpretation of PsAID-12 in practice.

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