Distribution of the components of the MDA response among patients with psoriatic arthritis with and without an acceptable symptomatic state

Sirs,

Psoriatic arthritis (PsA) is a relatively common inflammatory condition that displays a high phenotypic variability throughout its natural history. This has made both the disease activity evaluation and the assessment of therapeutic response huge challenges that many rheumatologists must address in their daily practice. In recent years, great progress has been made in the way in which disease activity as well as treatment objectives are measured in PsA (1). Much emphasis has also been placed on the need to collect the outcomes reported by patients. Thus, EULAR has proposed the *Psoriatic Arthritis Impact of Disease* (PsAID) tool to evaluate the impact of the disease on several aspects of patients' lives (2). However, there are notable discrepancies between the results derived from the measures of disease activity and the patient-reported outcomes (3). Also, it is important to define those barriers linked to a greater or lesser probability of achieving treatment goals. (4).

In this report we analysed the distribution of each item of the *Minimal Disease Activity* (MDA) response in patients who achieved an acceptable symptomatic state and compared it to those who did not reach that state.

This was a *post hoc* analysis of the MAAPs study (acronym in Spanish for minimal activity in psoriatic arthritis). The MAAPs study was a multicentre study carried out in 25 outpatient clinics to analyse the prevalence of the MDA response, and the disease factors associated with it, in PsA patients treated with biologic and non-biologic systemic therapies. The main results, as well as the methodological details of the MAAPs study, have been published elsewhere (5). Patients were considered in MDA when they met ≥5 of the 7 criteria defined by Coates *et al*. (6). The PsAID questionnaire reflects the impact of PsA from the patients' perspective. It is comprised of 12 physical and psychological domains. The final score ranges from 0 (best status) to 10 (worst status) with a cut-off of 4. A PsAID score below 4 is considered a patient-acceptable status (2).

Concordance was assessed using Cohen's kappa (κ) and was considered as follows: <0.20 = poor, 0.21–0.40 = fair, 0.41–0.60 = moderate, 0.61–0.80 = good, and 0.81–1.00 = very good.

One hundred and twenty two of the 223 patients (54.7%) included in the MAAPs study achieved a PsAID <4. Seventy-six out of 122 patients (62.3%) also achieved the MDA response. The characteristics of patients with PsAID <4 are shown in Table I. Including the whole population of the MAAPs study, the degree of agreement between MDA and PsAID <4 was fair, κ: 0.36 (0.24–0.48). The greatest differences between patients with and without an acceptable symptomatic state with respect to MDA items were seen in pain visual analogue scale (VAS), patient's global disease activity VAS, and HAQ. However, there were no differences in the swollen joint count ≤1, the skin domain, or the enthesitis count criteria (Table II).

We found a fair agreement between the MDA response and the impact of the disease perceived by patients according to the PsAID. Interestingly, when we analysed the items of the MDA response in patients with and without a PsAID <4, we found that the most differentiating aspects occurred in items not directly linked to the current inflammatory activity, but rather with aspects such as pain and physical disability. In fact, in both groups the swollen joint count ≤1 criterion was met by a similar proportion of patients. Therefore, this slight mismatch between MDA and PsAID is not surprising as both instruments capture very different aspects related to the disease and accordingly both should be included in the assessment of these patients in order to get a more reliable assessment of the disease.

It is likely that multifactorial aspects such as pain (which is related to inflammation but also to many other aspects linked or not to disease activity) or physical disability (related to structural damage) have a greater weight in the way in which patients perceive the impact of the disease. In that sense, the PsAID is a multidimensional instrument that covers very different aspects such as pain, disability, psychological dysfunction, leisure, work, embarrassment, etc., which go far beyond to what can be included in an index such as MDA (7).

Discrepancy between patient's and physician's ratings of general health status is not unusual in PsA (8). The consequence of such a discordant viewpoint is that decisions are often prone to not being shared between patients and physicians. The patients' own perspectives of their health status should be an important additional measure to assess disease activity as well as its impact and therefore for clinical and therapeutic decision-making (8, 9).

Both MDA and PsAID should be incorporated into the routine management of these cases since the information obtained by both instruments results complementary and of-

Table I. Demographic and clinical characteristics of patients with a PsAID score <4.

	Total n=122
Male, n (%)	70 (57.4)
Age, mean (SD), yrs.	54.5 (12.7)
BMI, mean (SD) (kg/m^2)	27.1 (3.9)
CRP (mg/L), mean (SD)	2.8 (3.3)
Comorbidities, n (%)	
Dyslipidaemia	40 (32.8)
HBP	33 (27.0)
Obesity	30 (24.6)
DM	12 (9.8)
PsA clinical patterns, n (%)	
Axial	3 (2.5)
Peripheral	107 (87.7)
Mixed	12 (9.8)
DIP disease	45 (36.9)
Familial history, n (%)	
Psoriasis	60 (49.2)
PsA	11 (9.0)
Ankylosing spondylitis	2 (1.6)
PsA duration, mean (SD), yrs.	9.6 (7.9)
Skin symptoms duration, mean (SD), yrs.	21.6 (14.5)
Articular symptoms duration, mean (SD), yrs.	11.9 (8.7)
Radiologic findings	
Erosions in hands, n (%)	40 (32.8)
Erosions in feet, n (%)	33 (27.0)
PASI, mean (SD)	1.2 (3.8)
HAQ, mean (SD)	0.2 (0.3)
HAQ ≤0.5, n (%)	104 (85.2)
MDA, n (%)	76 (62.3)

MDA: minimal disease activity; SD: standard deviation; BMI: Body Mass index; CRP: C-reactive protein; HBP: high blood pressure; DIP: distal interphalangeal joint disease; DM: diabetes mellitus; PASI: Psoriasis Area and Severity Index; HAQ: Health Assessment Questionnaire; PsAID: Psoriatic Arthritis Impact of Disease; CI: confidence intervals.
A PsAID score <4 is considered a patient-acceptable symptoms state.

Table II. Distribution of the MDA components between patients with and without a PsAID <4.

	PsAID <4		PsAID ≥4		*p*-value
	n	%	n	%	
TJC ≤1	91	74.6	53	52.5	**0.001**
SJC ≤1	82	67.2	70	69.3	**0.738**
PASI ≤1 or BSA ≤3%	96	79.3	78	78.8	**0.920**
Pain VAS ≤15	63	53.4	7	7.1	**<0.0001**
PtGDA VAS ≤20	68	55.7	28	27.7	**<0.0001**
HAQ ≤0.5	104	85.2	33	32.7	**<0.0001**
TEC ≤1	99	81.8	80	79.2	**0.624**

TJC: tender joint count; SJC: swollen joint count; PASI: Psoriasis Area and Severity Index; BSA: body surface area; VAS: visual analogue scale; PtGDA: Patient's Global Disease Activity; HAQ: Health Assessment Questionnaire; TEC: tender enthesis count; PsAID: Psoriatic Arthritis Impact of Disease; MDA: minimal disease activity.
Patients achieve an MDA response if they meet 5 of the 7 criteria.

fers the best panoramic vision of what really happens to these patients in their daily life.
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