

Presence of swollen and tender joints in patients fulfilling Minimal Disease Activity criteria.

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Minimal disease activity (MDA) is a composite measure created for patients with psoriatic arthritis (PsA) that encompasses many clinically important aspects of PsA: arthritis, psoriasis, enthesitis, pain, patient-assessed global disease activity, and physical function. A patient is considered to be in MDA if fulfills 5/7 criteria. In theory, a patient could be in MDA, but still have several tender and/or swollen joints.

Objectives: 1) To evaluate the number of patients fulfilling MDA criteria that still have several tender/swollen joints, and 2) To analyze the components of MDA that contribute most to prevent patients achieving MDA.

Patients and Methods: Consecutive patients with PsA (CASPAR criteria) were included, and all components of MDA score were assessed by a single experienced Rheumatologist. Patients were classified as in MDA if they fulfilled 5/7 criteria (tender joint count (TJC; 0-68) \leq 1; swollen joint count (SJC; 0-66) \leq 1; PASI \leq 1 or BSA \leq 3%; patient pain score on a visual analog scale (VAS; 0-100) \leq 15; patient global assessment of disease activity (PaGA; VAS; 0-100) \leq 20 mm; Health Assessment Questionnaire (HAQ; 0-3) \leq 0.5; and tender enthesal points (0-13) \leq 1). Percentage of patients with \geq 2 tender and/or swollen joints within patients in MDA was calculated. We also calculated the percentage of patients not fulfilling each one of the criteria for those patients with 4 out of 7 MDA criteria.

Results: 83 patients were included. Patient's characteristics according to MDA status are shown in the table. Among the 41 patients fulfilling MDA criteria, only one patient (2.4 %) showed more than 2 tender joints (3 tender joints), and two other patients showed \geq 2 swollen joints (one patient two and one patient three swollen joints). Altogether 7.4 % of patients, fulfilling MDA criteria presented a clinically significant number of tender/swollen joints.

Of those patients not in MDA status, 17 (40.5 %) fulfilled 4/7 criteria. Among those patients, the criteria more often not fulfilled were: patient pain score VAS \leq 15= 100 %; PaGA VAS \leq 20 mm =76.5 %; and PASI \leq 1 = 65 %. Only 29 %, 18 %, 6% and 6 % did not fulfilled tender joint count, HAQ, swollen joint count and enthesal tenderness criteria, respectively

Characteristics	MDA (n=41)	No MDA (n=42)	P value
Male sex (%)	23 (56)	21 (50)	0.578
Mean age yrs (SD)	55.6 (13.6)	51.2(14.3)	0.1528
Median months disease duration (IQR)	36 (12-96)	31.5 (10-48)	0.3460
Mean pain VAS mm (SD)	17.5 (20.1)	52.7 (20.1)	<0.0001
Mean Patient Global Activity VAS mm (SD)	14 (18.2)	47.2 (21.2)	<0.0001
Mean swollen joint count (SD)	0.3 (0.6)	2.7 (2.6)	<0.0001
Mean tender joint count (SD)	0.3 (0.6)	1.8 (2.6)	0.0003
Mean HAQ (SD)	0.15 (0.37)	0.43 (0.51)	0.0047

Mean tender enthesal points (SD)	0.12 (0.33)	0.49 (0.87)	0.0121
Mean PASI (SD)	1.5 (2.2)	3.8 (4.8)	0.0074
Mean DAS28 (SD)	2.3 (0.71)	3.7 (1.1)	<0.0001
Mean CPDAI (SD)	2.1 (1)	4 (1.9)	<0.0001
Mean ESR (SD)	19.8 (14.2)	24.8 (19.5)	0.1737
Number with >=2 tender joint count (%)	1 (2.4)	27 (64.3)	<0.0001
Number with >=2 swollen joint count (%)	2 (4.9)	18 (43)	0.002

Conclusions: Although possible in theory, only a minority of patients fulfilling MDA criteria present a clinically significant number of tender and/or swollen joints. In patients that were close to fulfill MDA criteria patient's VAS scores (pain and disease activity) and PASI were the most frequent reasons to fall short to MDA status.