Psoriatic Arthritis *sine* Psoriasis

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ABSTRACT. In about 20% of patients with psoriatic arthritis (PsA) the rheumatological manifestations precede the onset of the cutaneous lesions. If there is a family history of psoriasis these patients are diagnosed as having psoriatic arthritis sine psoriasis. In the past, they were also classified among patients with undifferentiated spondyloarthritis. The clinical spectrum of PsA sine psoriasis is wide and identified by dactylitis and/or distal interphalangeal arthritis, HLA-Cw6, and a family history of psoriasis. The ClASiffication of Psoriatic ARthritis (CASPAR) criteria of PsA include PsA sine psoriasis. (J Rheumatol 2009;36 Suppl 83:28-29; doi:10.3899/jrheum.090218)

Key Indexing Terms:
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Psoriatic arthritis (PsA), which is part of psoriatic disease, involves musculoskeletal and cutaneous structures[1-3]. Usually the skin and nail lesions antedate or appear at the same time as the rheumatological manifestations. However, in about 20% of patients the rheumatological manifestations precede the onset of the cutaneous lesions of psoriatic disease[4,5]. Of course, patients with the rheumatological manifestations in the absence of skin problems come to the rheumatologist. If they have a documented family history of psoriasis we diagnose them as having psoriatic arthritis *sine* psoriasis[6,7]. We are performing a study on consecutive patients with early PsA[8]. So far, among the 78 recruited patients, 13 (17%) had PsA *sine* psoriasis.

In the past, patients with PsA *sine* psoriasis were also diagnosed as having undifferentiated spondyloarthritis. The clinical spectrum of undifferentiated spondyloarthritis includes the incomplete forms of definite spondyloarthritides (for example, reactive arthritis with an asymptomatic infective trigger episode, and PsA *sine* psoriasis), early forms of definite spondyloarthritides (for example, the preradiological phase of ankylosing spondylitis), and forms that remain undifferentiated for a very long time[9].

Some years ago we studied all patients with PsA *sine* psoriasis seen in a 12-month period with the aim to evaluate its clinical spectrum[6]. The inclusion criteria comprised clinical symptoms and signs suggestive of PsA, psoriasis in at least one first-degree relative, and the absence of other rheumatic diseases. Twenty patients, 16 female, 4 male, were seen in the study period. The mean age was 44.1 years (range 15-77) and mean duration of disease 5.3 years (range 1-30). With regard to clinical manifestations, 5 patients had peripheral arthritis, peripheral enthesitis, and tenosynovitis; 2 had peripheral arthritis, tenosynovitis, and axial involvement; 4 had peripheral arthritis and tenosynovitis; 4 had peripheral enthesitis and tenosynovitis; 1 had peripheral arthritis and peripheral enthesitis; 3 had only peripheral arthritis; and 1 only peripheral enthesitis. Fifteen patients met the Amor criteria[10] and 11 the European Spondylarthropathy Study Group (ESSG) criteria for spondyloarthritis[11]. The study conclusions were that the clinical spectrum of PsA *sine* psoriasis seems to be as broad as that of PsA and that the Amor and ESSG criteria lack sensitivity in patients with PsA *sine* psoriasis.

More recently, Scarpa and coworkers published a study on the clinical and genetic aspects of PsA *sine* psoriasis[7]. The aim was to characterize the clinical pattern of PsA *sine* psoriasis. Fifty-seven patients (31 female, 26 male) with undifferentiated spondyloarthritis and seen in a 9-month period were studied. Regarding the clinical manifestations, dactylitis and arthritis of the distal interphalangeal (DIP) joints were significantly more frequent in patients with a family history of psoriasis than in those without. With regard to HLA typing, the Cw6 antigen was significantly more frequent in patients with a family history of psoriasis, and the B27 antigen showed a significantly increased frequency in those without a family history of psoriasis. In addition, the presence of HLA-Cw6 was related to the presence of DIP arthritis and dactylitis. The conclusion of the study was that the subset of PsA *sine* psoriasis is identified by dactylitis and/or DIP arthritis, HLA Cw6, and a family history of psoriasis.

Two distinct forms of psoriasis vulgaris have been identified: hereditary, with onset between age 15 and 25 years, and sporadic, with onset at a later age[12]. Over 80% of patients with onset at an early age had the presence of HLA-Cw6 and first-degree family members with psoriasis. A study by Rahman and coworkers found that patients with PsA and early onset psoriasis have increased frequency of HLA-Cw6, strong familial tendency, and a predilection for skin lesions before arthritis[13].

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The new set of classification criteria for PsA that was proposed in 2006, and which has better specificity and sensitivity than those published previously, should be universally accepted in the next few years. The new criteria set allows classification of the disease in the absence of psoriasis if the typical findings of PsA are present. Patients without skin lesions should necessarily have a first- or a second-degree relative with psoriasis[14].

In conclusion, patients with clinical symptoms and signs of PsA and a family history of psoriasis can be classified as having PsA *sine* psoriasis. The clinical spectrum of PsA *sine* psoriasis is broad. It is identified by dactylitis and/or DIP arthritis, HLA-Cw6, and a family history of psoriasis. The ClASsification of Psoriatic ARthritis (CASPAR) criteria[14] allow us to classify psoriatic arthritis *sine* psoriasis.

REFERENCES

1. Scarpa R, Ayala F, Caporaso N, Olivieri I. Psoriasis, psoriatic arthritis, or psoriatic disease? J Rheumatol 2006;33:210-2.
2. Ritchlin C. Psoriatic disease – from skin to bone. Nat Clin Pract Rheumatol 2007;3:698-706.
3. Gladman DD, Rahman P, Krueger GG, et al. Clinical and genetic registries in psoriatic disease. J Rheumatol 2008;35:1458 63.
4. Scarpa R, Oriente P, Pucino A, et al. Psoriatic arthritis in psoriatic patients. Br J Rheumatol 1984:23:246-50.
5. Gladman DD, Shuckett R, Russell ML, Thorne JC, Schachter RK. Psoriatic arthritis (PSA) – an analysis of 220 patients. Q J Med 1987;62:127-41.
6. Olivieri I, Ciancio G, Padula A, et al. Psoriatic arthritis sine psoriasis: a study of 20 consecutive patients [abstract]. Arthritis Rheum 2000;43 Suppl:S105.
7. Scarpa R, Cosentini E, Manguso F, et al. Clinical and genetic aspects of psoriatic arthritis "sine psoriasis". J Rheumatol 2003;30:2638-40.
8. D'Angelo S, Ferrante MC, Atteno M, et al. The performance of CASPAR criteria in early psoriatic arthritis: preliminary results from an Italian prospective multicentre study [abstract]. Ann Rheum Dis 2008;67 Suppl 2:525.
9. Olivieri I, van Tubergen A, Salvarani C, van der Linden S. Seronegative spondyloarthritides. Best Pract Res Clin Rheumatol 2002;16:723-39.
10. Amor B, Dougados M, Mijiyawa M. Criteria of the classification of spondylarthropathies [French]. Rev Rum Mal Osteoartic 1990;57:85-9.
11. Dougados M, van der Linden S, Juhlin R, et al. The European Spondylarthropathy Study Group preliminary criteria for the classification of spondylarthropathy. Arthritis Rheum 1991;34:1218-27.
12. Henseler T, Christophers E. Psoriasis of early and late onset: characterization of two types of psoriasis vulgaris. J Am Acad Dermatol 1985;13:450-6.
13. Rahman P, Schentag CT, Gladman DD. Immunogenetic profile of patients with psoriatic arthritis varies according to the onset of psoriasis. Arthritis Rheum 1999;42:822-3.
14. Taylor W, Gladman D, Helliwell P, Marchesoni A, Mease P, Mielants H. Classification criteria for psoriatic arthritis: development of new criteria from a large international study. Arthritis Rheum 2006;54:2665-73.