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Psoriatic arthritis: One or more diseases?

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Psoriatic arthritis (PsA) is a common, debilitating auto-immune disease with diverse clinical features. In this paper, published evidence is examined, which addresses the issues that (a) PsA exists; and (b) PsA can or cannot be viewed as a distinct rheumatic disease from other spondyloarthritides. Evidence derived from epidemiological, clinical, genetic and immunohistological studies is included. Summarizing the evidence, it is clear that PsA does indeed exist, with the prevalence of rheumatic disease in patients with psoriasis (Ps) higher than would be expected. Certain clinical features also occur more commonly in PsA, although none can differentiate consistently from other arthropathies. Both genetic and immunohistological studies suggest that PsA, both oligo- and polyarticular disease, can be clearly separated from rheumatoid arthritis and that it belongs to the family of spondyloarthritides. The presence of Ps may confer a more severe clinical phenotype with poor radiological outcome. It may be that, with time, a specific genetic marker or diagnostic feature will emerge; additional, more detailed pathogenic studies are required. In the meanwhile, particularly with new treatments being evaluated, it is important to continue to develop specific classification or diagnostic criteria and to define both clinical and laboratory-based outcome measures.

Key words: psoriatic arthritis; epidemiology; clinical features; genetics; immunohistology.

Despite the fact that most rheumatology textbooks include a specific chapter on psoriatic arthritis (PsA), this disease entity is still a matter of debate.[1,2] Both clinicians and researchers are considering the following possibilities:

- PsA does not exist at all; the high prevalence of psoriasis (Ps) in the population explains why one observes Ps in patients suffering from rheumatic disorders.
- PsA does not exist by itself, but the presence of Ps confers a specific presentation to the underlying rheumatic disease [e.g. dactylitis, distal interphalangeal (DIP)

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involvement in the case of peripheral arthritis; severity and cervical localization of syndesmophytes in the case of axial involvement].
- PsA does exist but all the clinical manifestations are those observed in the spondyloarthritides. Therefore, PsA should be viewed as a subgroup of the spondyloarthritides such as ankylosing spondylitis.
- PsA does exist and, therefore, requires specific diagnostic/classification criteria, specific outcome measures and specific treatment modalities.

In order to evaluate these different hypotheses, this article will try to address the following questions.

- Are rheumatological manifestations observed more frequently in patients with Ps?
- Is Ps observed more frequently in patients suffering from rheumatic disorders?
- Is the clinical presentation of rheumatic diseases different when there is concomitant Ps?
- Are the rheumatological manifestations observed in patients with Ps different from those observed in spondyloarthritis?
- Are there clues arising from genetic studies or studies, which focus on inflamed skin or synovial tissue that help one to separate PsA from other defined arthropathies?

In order to answer these questions, three differing approaches will be taken: the epidemiologist's approach, the clinician's approach and the researcher's approach.

EPIDEMIOLOGICAL APPROACH

Prevalence of Ps vs rheumatic diseases

It is curious that this field of research has been so poorly evaluated. In particular, there have only been a few studies where there was no specific a priori with regard to the potential clinical presentation of the musculoskeletal disorders in patients presenting with concomitant Ps.

Respective prevalence of Ps and rheumatic diseases

The main difference between these two disorders is that Ps (whatever its clinical presentation) is usually recognized as a single specific entity. On the other hand, rheumatic diseases encompass numerous entities that are viewed as completely different in terms of pathophysiology, such as osteoarthritis, soft tissue disorders, bone diseases (e.g. osteoporosis) and inflammatory rheumatic diseases [e.g. rheumatoid arthritis (RA), spondyloarthritis].

The prevalence of Ps in the population has, in fact, been poorly studied but is estimated to be 2–6%.[3] In contrast, the prevalence of the different musculoskeletal conditions has been and continues to be studied extensively. When focusing on the subgroup of peripheral arthritis, whatever the underlying specific diseases, such prevalence is usually estimated to be 0.6–1.2%.[4] When focusing on the subgroup of axial involvement (spondyloarthritis), the prevalence is approximately 0.2–0.5%.[5]

Rheumatological manifestations observed in patients with and without Ps

To the authors' knowledge, only one properly conducted population-based study has addressed this issue. In this study, reported more than 20 years ago, the frequency of