

# Fibromyalgia and Enthesitis in Psoriatic Arthritis. Time to “Characterize” and “Refine” Clinical Definitions



Psoriatic arthritis (PsA) is a complex disease characterized by the presence of polyarthritis, spinal disease, dactylitis, enthesitis, and cutaneous involvement<sup>1</sup>. Due to considerable research efforts in PsA in recent years, criteria for classification of PsA<sup>2</sup> (the CASPAR criteria) have been developed, as well as definitions of clinical features and how to assess them<sup>3</sup>. In terms of evaluating disease activity, efforts are being made to determine whether composite measures of disease activity and response to therapy can be developed to cover all the domains that characterize PsA<sup>4</sup>.

At present a patient can be classified as having PsA by meeting the CASPAR criteria; nevertheless, in applying the criteria, it is mandatory that the patient must have an inflammatory articular disease (joint, spine, or enthesal). The lack of definition of these entry criteria, crucial for applying the CASPAR criteria, may explain some of the difficulties in clinical research in PsA; for instance, validation of the CASPAR criteria for diagnostic purposes encounters difficulty when criteria are used in a general setting<sup>5</sup>.

Two recent studies<sup>5,6</sup> testing the sensitivity of the CASPAR criteria in early PsA found different results (99.1% vs 77.3%); apart from the methodological differences in the 2 studies, it is important to emphasize that the clinical diagnosis of PsA relied on clinical expertise as the “gold standard.” Moreover, as many as 43% of patients, in the study with the lowest sensitivity, had a clinical pattern of tenosynovitis, enthesitis, or dactylitis. When tested against noninflammatory diseases<sup>7</sup> (osteoarthritis and fibromyalgia, FM), in established PsA the sensitivity was 96.1% and the specificity 87.5%.

Recent evidence shows a great divergence between clinical and image findings (total body scintigraphy and ultrasound, US) in early PsA<sup>8</sup>, such that subclinical disease was demonstrated and the pattern of arthritis was reclassified. Again in the same study, clinical diagnosis was the gold standard and as many as three-quarters of patients had oligo-enthesoarthritis.

The presence of “occult” or “painless” disease<sup>9</sup> is another

important issue when considering a clinical diagnosis of PsA. Several studies have demonstrated, especially in spinal disease<sup>10</sup>, the presence of disease without symptoms. Studies using new imaging techniques such as magnetic resonance imaging (MRI) and high-resolution US found subclinical signs of arthritis<sup>11</sup> or lower limb enthesal abnormalities<sup>12</sup> in patients with psoriasis. A high prevalence (~70%) of enthesal abnormalities was also found in patients with PsA using power Doppler US (PDUS)<sup>13,14</sup>.

The lack of a definition of inflammatory articular disease and the recent findings with the newer imaging techniques create problems with the diagnosis of PsA, especially when the spine and entheses are involved<sup>15</sup>.

Enthesitis is considered a major feature of PsA and can sometimes be the sole manifestation of early PsA<sup>8,16</sup>, yet the clinical diagnosis of enthesitis may be difficult. Enthesitis is widely acknowledged as a domain that must be included in the assessment of disease activity in PsA<sup>3,4</sup>; however, clinical exploration, based on the presence or absence of pain by applying enough pressure to blanch the tip of the finger, is equivocal. FM is a condition<sup>17</sup> characterized by the presence of widespread pain associated with at least 11 of 18 tender points sites on digital palpation; its prevalence in the general population varies between 2% and 4%, and in some cases is associated with rheumatic diseases. The presence of FM in a rheumatic disease can confuse accurate evaluation of disease<sup>18</sup>.

Given that enthesitis and FM are characterized by the presence of tender points, it is relevant to be able to distinguish both conditions in a patient with cutaneous psoriasis; using current CASPAR criteria (without a definition of enthesitis) there is a probability of misclassifying some of these patients.

In this issue of *The Journal* Marchesoni and colleagues<sup>19</sup> report the clinical features that can help a physician on clinical grounds to differentiate PsA from FM. A patient has the highest probability of having FM if  $\geq 6$  somatic manifestations (according to the new diagnostic criteria for FM) and

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≥ 8 tender points are present; thus, if a patient has both criteria, a diagnosis of primary or secondary FM can be made.

Their study, however, raises many questions: the Maastricht Ankylosing Spondylitis Enthesitis Index (MASES), used for measuring enthesitis, showed overlap between the 2 diseases. On the other hand, recent work with PDUS has shown a high prevalence of enthesal abnormalities (~70%) in patients with PsA and a poor correlation between PDUS and MASES<sup>14,15</sup>. These data emphasize the difficulties in assessing and understanding the clinical relevance of “at least” some enthesal involvement in PsA.

Studies with US and PDUS have demonstrated a high prevalence of enthesal abnormalities in patients with psoriasis without PsA<sup>12,20</sup>; these findings raise the question of their specificity and clinical meaning. If the lesions found were considered to be specific, many of these patients could be classified as enthesal PsA and would therefore meet the CASPAR criteria.

There is thus a need to clarify several questions concerning enthesal involvement in PsA: (1) to find an accepted and agreed-on method of clinical exploration; (2) to develop a reliable definition of enthesopathy using PDUS, in other words, based on active lesions; (3) to establish correlations between clinical and PDUS findings; (4) to determine the clinical relevance of PDUS findings, not only in psoriasis patients without arthritis, but also in patients with PsA; and (5) to explore the utility of MRI in assessing the enthesal involvement in PsA.

When all these issues have been resolved, a clear definition of enthesal involvement may emerge, and clinicians will be more confident about making decisions, whether for the purpose of diagnosis or for indicating clinical treatments based on objective findings.

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