Psoriatic Arthritis and Sonographic Enthesial Index

To the Editor:

We read with great interest the recent article, “Identification of the Clinical Features Distinguishing Psoriatic Arthritis and Fibromyalgia” by Marchesoni, et al. However, we have some doubts about their results. They reported that Achilles tendon entheses were not significantly more involved in patients with psoriatic arthritis (PsA), because of the infrequent involvement of this tendon in these patients. This is an intriguing finding. The Achilles tendons are among the most frequent sites of enthesopathic involvement in PsA, and are reported in 10−30% of patients. Further, this enthesopathic involvement can be readily visualized with ultrasound, even if the patients have subclinical enthesal involvement. Several studies have revealed that certain elemental lesions of enthesis, including bony changes, tendon thickening, etc., cannot be sufficiently distinguished from enthesal involvement due to mechanical and degenerative processes. The finding of subclinical enthesis in clinically asymptomatic regions in patients with PsA emphasizes the low concordance between clinical symptoms and imaging results interpreted as pathological findings. Marchesoni, et al described similar results, although their patients were clinically symptomatic. This may be a result of using the Maastricht Ankylosing Spondylitis Enthesitis Score (MASES), which has been reported with moderate intraobserver agreement among patients with PsA, with an intraclass correlation coefficient of 0.56 (95% CI 0.34, 0.82). According to Outcome Measures in Rheumatology Clinical Trials definitions of enthesopathy, the outcome changes — tendon hypoechogenicity at its bony insertion, tendon thickening at bony insertion, intratendinous calcifications, enthesophytes, bony cortex irregularities — were not mentioned in the 2 groups, with the exception of bony erosion and power Doppler ultrasound (PDUS), in the Marchesoni study.

The Madrid Sonographic Enthesis Index (MASEI) was recently validated for diagnostic classification of spondyloarthropathies. The MASEI is a weighted score calculated by logistic regression that overestimates the enthesis score of 3 elemental lesions: calcification (score 0−3), Doppler (0 or 3), and erosion (0 or 3), while scoring tendon structure, tendon thickness, and bursa as either 0 or 18. The score range is 0−136 and a value ≥ 18 was involved in patients with psoriatic arthritis (PsA), because of the infrequent imaging results interpreted as pathological findings.

Marchesoni, et al investigated for diagnostic classification of spondyloarthropathies.8,9 The MASEI is a weighted score calculated by logistic regression that overestimates the enthesis score of 3 elemental lesions: calcification (score 0−3), Doppler (0 or 3), and erosion (0 or 3), while scoring tendon structure, tendon thickness, and bursa as either 0 or 18. The score range is 0−136 and a value ≥ 18 was established as the best cutoff point to differentiate cases and healthy controls. We suggest that if the MASEI was used for this study because of weighted scoring, especially in PDUS, it would be capable of scoring these elemental lesions and would also define the best cutoff point for discriminating between groups, and a high concordance rate between clinical and PDUS enthesis could be found.

REFERENCES


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