

## Psoriatic Arthritis and Sonographic Enteseal 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*<sup>1</sup>. 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<sup>2,3</sup>. Further, this enthesopathic involvement can be readily visualized with ultrasound, even if the patients have subclinical enthesal involvement<sup>4</sup>. However, with increased sensitivity comes reduced specificity. Several studies have revealed that certain elemental lesions of enthesitis, including bony changes, tendon thickening, etc., cannot be sufficiently distinguished from enthesal involvement due to mechanical and degenerative processes<sup>5,6</sup>. The finding of subclinical enthesitis 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<sup>1</sup>. 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)<sup>7</sup>. 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, enthesiophytes, 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<sup>1</sup>.

The Madrid Sonographic Enthesis Index (MASEI) was recently validated for diagnostic classification of spondyloarthropathies<sup>8,9</sup>. The MASEI is a weighted score calculated by logistic regression that overestimates the 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  $\geq 18$  was established as the best cutoff point to differentiate cases and healthy controls<sup>8</sup>. 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 enthesitis could be found.

FUAT OZKAN, MD; MEHMET INCI, MD, Department of Radiology; KEMAL OZYURT, MD, Department of Dermatology; BETUL BAKAN, MD, Department of Physical Medicine and Rehabilitation, Kahramanmaraş Sutcu Imam University Faculty of Medicine, Kahramanmaraş, Turkey. Address correspondence to Dr. Ozkan, Kahramanmaraş Sutcu Imam University, Faculty of Medicine, Department of Radiology, 46050 Kahramanmaraş, Turkey. E-mail: drfozkan@yahoo.com

## REFERENCES

1. Marchesoni A, Atzeni F, Spadaro A, Lubrano E, Provenzano G, Cauli A, et al. Identification of the clinical features distinguishing psoriatic arthritis and fibromyalgia. *J Rheumatol* 2012;39:849-55.
2. De Simone C, Guerriero C, Giampetruzzi AR, Costantini M, Di Gregorio F, Amerio P. Achilles tendinitis in psoriasis: Clinical and sonographic findings. *J Am Acad Dermatol* 2003;49:217-22.
3. Galluzzo E, Lischi DM, Taglione E, Lombardini F, Pasero G, Perri G, et al. Sonographic analysis of the ankle in patients with psoriatic arthritis. *Scand J Rheumatol* 2000;29:52-5.
4. Gisondi P, Tinazzi I, El-Dalati G, Gallo M, Biasi D, Barbara LM, et al. Lower limb enthesopathy in patients with psoriasis without clinical signs of arthropathy: A hospital-based case-control study. *Ann Rheum Dis* 2008;67:26-30.
5. Falsetti P, Frediani B, Fioravanti A, Acciai C, Baldi F, Filippou G, et al. Sonographic study of calcaneal entheses in erosive osteoarthritis, nodal osteoarthritis, rheumatoid arthritis and psoriatic arthritis. *Scand J Rheumatol* 2003;32:229-34.
6. Genc H, Cakit BD, Tuncbilek I, Erdem HR. Ultrasonographic evaluation of tendons and enthesal sites in rheumatoid arthritis: Comparison with ankylosing spondylitis and healthy subjects. *Clin Rheumatol* 2005;24:272-7.
7. Gladman DD, Inman RD, Cook RJ, Maksymowych WP, Braun J, Davis JC, et al. International spondyloarthritis interobserver reliability exercise — The INSPIRE study: II. Assessment of peripheral joints, enthesitis, and dactylitis. *J Rheumatol* 2007;34:1740-5.
8. de Miguel E, Cobo T, Munoz-Fernandez S, Naredo E, Uson J, Acebes JC, et al. Validity of enthesitis ultrasound assessment in spondyloarthropathy. *Ann Rheum Dis* 2009;68:169-74.
9. Meric JC, Grandgeorge Y, Lotito G, Pham T. Walking before an ultrasound assessment increases the enthesitis score significantly. *J Rheumatol* 2011;38:961.

*J Rheumatol* 2012;39:10; doi:10.3899/jrheum.120634