

No Enthesis Should Be Overlooked When Psoriatic Arthritis Is Suspected: Enthesitis of the Extensor Digitorum Tendons

GEORGIOS FILIPPOU, MD, PhD; VALENTINA DI SABATINO, MD; ANTONELLA ADINOLFI, MD; ILARIA BERTOLDI, MD; VALENTINA PICERNO, MD; GIOVANNI BIASI, MD; MAURO GALEAZZI, MD, Professor; BRUNO FREDIANI, MD, Professor; Rheumatology Section, Department of Clinical Medicine and Immunology, University of Siena, Viale Bracci 16, 53100 Siena, Italy. Address correspondence to Dr. Filippou; E-mail: g_filippou@virgilio.it. J Rheumatol 2013;40:335; doi:10.3899/jrheum.121123

A common and well-documented feature of spondyloarthropathies is inflammation of the peripheral entheses¹. Ultrasound (US) imaging is useful when assessing enthesitis, and many investigators have described its features^{2,3}.

A 50-year-old man with psoriasis developed morning stiffness, tenderness, and swelling of small joints in the hands asymmetrically during the last month. Clinical examination revealed tenderness and swelling of the proximal interphalangeal joints (PIP) of the second, third, and fourth fingers of the left and second finger of the right hand and the metacarpophalangeal (MCP) joints of the second and third fingers of the right hand. US of both hands was carried out to analyze the inflammation. The principal finding on US was swelling and hypoechogenicity of the entheses of the extensor tendons on the involved PIP, with a medium-severe signal within the entheses on power Doppler analysis, typical of enthesitis. Peritendinous edema and power Doppler signal at the second and third MCP joints were also found, as described by Gutierrez, *et al*⁴. The authors reported a high specificity of this sign for psoriatic arthritis even though the same US picture was present in patients with rheumatoid arthritis as described by Backhaus, *et al*⁵.

In our investigation, we focused on the enthesitis of the extensor digitorum tendons at the PIP (Figure 1). To our knowledge, this has not been documented as a US finding previously. Further studies are needed to expose enthesitis of the hands when differentiating rheumatoid arthritis from psoriatic arthritis.

REFERENCES

1. D'Agostino MA, Palazzi C, Olivieri I. Enthesal involvement. Clin Exp Rheumatol 2009;27 Suppl 55:S50-5.
2. Gandjbakhch F, Terslev L, Joshua F, Wakefield RJ, Naredo E, D'Agostino MA; OMERACT Ultrasound Task Force. Ultrasound in the evaluation of enthesitis: status and perspectives. Arthritis Res Ther 2011;13:R188.
3. Falsetti P, Acciai C, Lenzi L, Frediani B. Ultrasound of enthesopathy in rheumatic diseases. Mod Rheumatol 2009;19:103-13.
4. Gutierrez M, Filippucci E, Salaffi F, Di Geso L, Grassi W. Differential diagnosis between rheumatoid arthritis and psoriatic arthritis: The value of ultrasound findings at metacarpophalangeal joint level. Ann Rheum Dis 2011;70:1111-4.
5. Backhaus M, Ohrndorf S, Kellner H, Strunk J, Backhaus TM, Hartung W, et al. Evaluation of a novel 7-joint ultrasound score in daily rheumatologic practice: a pilot project. Arthritis Rheum 2009;61:1194-201.

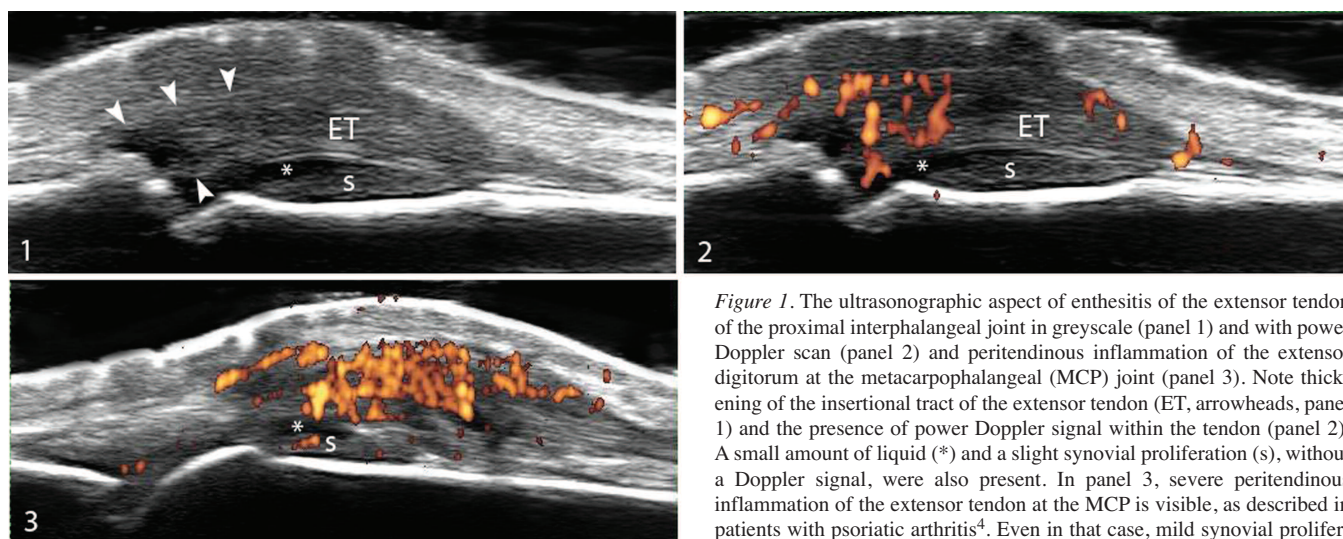


Figure 1. The ultrasonographic aspect of enthesitis of the extensor tendon of the proximal interphalangeal joint in greyscale (panel 1) and with power Doppler scan (panel 2) and peritendinous inflammation of the extensor digitorum at the metacarpophalangeal (MCP) joint (panel 3). Note thickening of the insertional tract of the extensor tendon (ET, arrowheads, panel 1) and the presence of power Doppler signal within the tendon (panel 2). A small amount of liquid (*) and a slight synovial proliferation (s), without a Doppler signal, were also present. In panel 3, severe peritendinous inflammation of the extensor tendon at the MCP is visible, as described in patients with psoriatic arthritis⁴. Even in that case, mild synovial proliferation with a few spots of power Doppler signal was present.