

Grundlagen

Walther M, Radke S, Kirschner S, Ettl V, Gohlke F: Power Doppler findings in plantar fasciitis. *Ultrasound Med Biol* (2004) 30:435-440

Abstract:

The study was performed to characterize the power Doppler sonographic (PDS) findings in plantar fasciitis using a 7,5 MHz linear transducer. Both feet of 20 patients who had a clinical and ultrasound diagnosis of unilateral plantar fasciitis were evaluated with power Doppler sonography. The pain level was assessed with a visual analogue scale (VAS). 20 healthy volunteers were evaluated as a control group. Moderate or marked hyperemia was found in power Doppler ultrasound in the plantar fascia and the surrounding soft tissue along the first cm distally from the insertion in 8 of the 20 (40%) symptomatic heels and in one patient (5%) on the asymptomatic side. Moderate or marked hyperemia was associated with a history of less than 6 months and high pain levels. The difference between both groups was significant ($p < 0,05$). PDS improves the value of ultrasound as a noninvasive technique for the diagnosis of plantar fasciitis, providing additional information on local hyperemia.

Key words: ultrasound, ultrasound-power doppler, soft tissues, foot, inflammation, plantar fasciitis, heel spur