

FIGURE 1. (A) Long-axis view of the posterior tibial nerve (arrows) showing the nerve tumor as a hypoechoic soft tissue mass within the nerve sheath. (B) Oblique short-axis view of the soft tissue mass showing vascularity on color Doppler ultrasound.

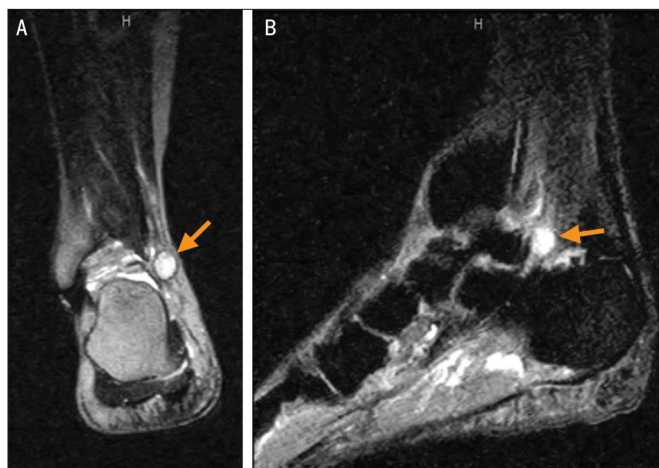


FIGURE 2. (A) Coronal, T2-weighted, fast spin-echo magnetic resonance image of the ankle showing the nerve tumor (arrow). (B) Sagittal, short-tau inversion recovery magnetic resonance image showing the nerve tumor (arrow).

Schwannoma of the Posterior Tibial Nerve

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A 61-YEAR-OLD WOMAN WAS REFERRED to physical therapy by a podiatrist who suspected a posterior tibialis degenerative tear. Previously, the patient had been walking 4 miles a day for the past 3 years. Pain at the right medial ankle began insidiously 1.5 years ago and progressed to where she stopped exercising 2 months ago. Her chief complaint was activity-instigated pain in the medial ankle that radiated into the medial calf and the first 2 toes. Prior vascular ultrasound ruled out peripheral vascular disease.

Clinical examination noted an antalgic gait due to exacerbation of pain with active dorsiflexion. Manual muscle testing

at the ankle was within normal limits for all muscles. Pain at the medial ankle was elicited with passive, active, and resisted motions into dorsiflexion and eversion. Tinel's test to the tarsal tunnel reproduced pain to the medial calf and toes.

To further examine the irritable posterior tibial nerve, a musculoskeletal ultrasound examination was performed, revealing a focal soft tissue mass within the posterior tibial nerve near the tarsal tunnel, showing a vascularized focal lesion suggestive of a nerve tumor (FIGURE 1).^{1,3} The patient was referred back to the referring podiatrist, who ordered magnetic resonance imaging, which confirmed the schwannoma of the posterior

tibialis nerve (FIGURE 2).² The patient had surgery to remove the schwannoma without loss of the motor portion of the nerve, preventing loss of function to the patient's foot/ankle. She returned to pain-free gait following the surgery.

Diagnosis of a posterior tibial nerve schwannoma is often delayed, as in this patient's case, as the tumor may be deep and not easily palpable. Also, neuropathic pain at the foot can be mistaken for lumbar radiculopathy in the absence of a palpable mass. Musculoskeletal ultrasound expedited this patient's diagnosis and successful treatment. ● *J Orthop Sports Phys Ther* 2020;50(2):111. doi:10.2519/jospt.2020.9103

References

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