Posterior Tibialis Tendinopathy

A 43-year-old woman presented to her primary care physician with medial ankle pain of several weeks. Ankle radiograph revealed an accessory navicular bone (arrow, A). After conservative measures failed to alleviate her pain, she underwent an ankle MRI, which revealed bone marrow edema in the accessory navicular bone (arrow, B) and increased posterior tibialis tendon diameter (arrow, C). These findings are consistent with posterior tibialis tendinopathy.¹

Posterior tibialis tendon dysfunction is the most common cause of acquired flatfoot deformity in adults. It typically occurs in overweight, middle-aged women. Additional risk factors include diabetes, hypertension, obesity, rheumatoid arthritis, seronegative spondyloarthropathies, and prior local steroid injections. Importantly, posterior tibialis tendinopathy is strongly associated with accessory navicular bones, which are more common in women. Specifically, women are twice as likely as men to present with increased posterior tibialis tendon sheath fluid.²

Pseudoarthrosis between the navicular bone and accessory ossicle predisposes individuals to reactive changes in the posterior tibialis tendon and tendon sheath. The resulting posterior tibialis tendon dysfunction can lead to chronic ankle pain and acquired flatfoot deformity.

References