

CLINICAL HISTORY: A 24-year-old female with medial ankle pain since November, 2014 and collapse of the arch with a suspected tear or rupture of the posterior tibial tendon.

TECHNIQUE: Multiplanar, multisequence fat and water-weighted images of the left ankle were performed.

FINDINGS: High-grade tearing of the supramalleolar, retromalleolar and inframalleolar posterior tibial tendon includes hypertrophic type I enlargement of a supramalleolar segment, estimated 50% tearing of the retromalleolar segment and further type I partial tearing from the mid watershed zone through the insertion. No complete rupture is observed. Located posterior to the tendon, on image 13 of series 6, is a tear with a flap-like component. There is associated midfoot pronation and marked medial fascial crural edema. No tearing at the FDL or FHL tendons.

Fluid prolapse from the tear extends into the anterior tarsal tunnel. The medial and lateral plantar neurovascular bundles of the tarsal tunnel are intact. The dorsalis pedis and deep peroneal nerves are normal.

No tearing of the extensor tendons including the ATT insertion.

Intact peroneus longus and peroneus brevis tendons without tearing, tenosynovitis, subluxation, or disruption of the superior peroneal retinaculum.

Chronic scarring of the anterior talofibular and calcaneofibular ligaments may be secondary to old sprains without a hematoma or meniscoid lesion at the anterolateral gutter. No defect of the syndesmotric, posterior talofibular, superficial or deep components of the deltoid ligament complex.

No subtalar ligament tearing is identified. There is mild fluid in the posterior recess of the sinus tarsi.

Periaponeurotic edema is identified without rupture or marked enlargement of the plantar aponeurosis. No Baxter's denervation atrophy of the abductor digiti minimi. There is moderate pes planus.

Inflammation of the retro-Achilles soft tissues is identified. No tearing of the Achilles tendon or teno-osseous insertion. No fracture of the medial or lateral malleolus.

No hindfoot fracture or osteonecrosis. Normal tibiotalar joint without an OCD lesion of the talar dome. Normal subtalar joints, talonavicular and calcaneocuboid articulations, and a normal anterosuperior calcaneal process, bifurcate and dorsal talonavicular ligament, and naviculocuneiform joint.

IMPRESSION (MRI OF THE LEFT ANKLE:

- 1. Associated with a suspected collapsing pes planovalgus deformity is high-grade tearing of the retromalleolar and proximal inframalleolar posterior tibial tendon with a complex tear that includes an oblique tear and a flap of the proximal inframalleolar watershed zone, hypertrophic type I tearing of the mid watershed zone through the insertion and fissuring and hypertrophic enlargement of the supramalleolar fragment. There is associated marked tenosynovitis, paratendonitis with fluid prolapse towards the anterior tarsal tunnel and medial fascial crural edema which is often associated with a fascial crural strain and altered biomechanics of PTT dysfunction.**

2. No tearing of the other medial flexor, extensor or peroneal tendons. No bone marrow edema at the medial pole navicular insertion of the PTT or os tibiale externum.
3. Mild chronic lateral collateral ligament scarring without an acute defect.
4. Minimal sinus tarsi.
5. Evidence of a chronic lateral collateral ligament sprain with scarring, but no ligamentous defect.
6. No tearing of the Achilles tendon or plantar fascia.