

**CLINICAL HISTORY:** 40-year-old female with continuous pain and swelling of the left ankle after a fall one year ago, rule out a peroneal tendon tear with symptoms at the fibular groove.

**TECHNIQUE:** Multiplanar, multisequence fat and water-weighted images of the left ankle and midfoot were performed. These images were performed in accordance with the peroneal tendon protocol.

**FINDINGS: Correlation for snapping or dislocating peroneal tendons is recommended given the presence of complete anterolateral dislocation of peroneus longus at the level of the distal fibula without rupture or a morphologic high-grade tear.** Partial tearing of the retromalleolar and proximal inframalleolar peroneus brevis tendon without a discrete longitudinal split tear component is likely. No tearing of the peroneus brevis insertion. Mild peroneus longus tendinosis on the midfoot images is noted as the peroneus longus tendon traverses the cubital tunnel. No fracture at the base of the fifth metatarsal at the peroneus brevis tendon insertion. There is stripping of the superior peroneal retinaculum. A concave retromalleolar sulcus is noted. Interestingly, there is only mild tenosynovitis, but moderate paratendinitis suggests a potentially symptomatic peroneal tendons. The subluxed and dislocated portions of the peroneus longus tendon exhibit mild tendinopathy with fraying and mucoid degeneration. No tearing of the medial flexor tendons.

There is mild posterior tibial paratendinitis. No os tibiale externum at the medial pole navicular insertion of the PTT. No tearing of the extensor tendons including the ATT insertion.

There are varicosities within the proximal tarsal tunnel. No specific manifestations of the tarsal tunnel syndrome.

It is suspected that the peroneal tendon pathology and instability may be secondary to a chronic lateral ankle sprain. Attrition of the anterior talofibular ligament and scarring of the calcaneofibular ligament suggests a chronic grade II lateral collateral ligament sprain without an acute hematoma or a meniscoid lesion in the anterolateral gutter. Intact anterior and posterior inferior syndesmotric, posterior talofibular, and deltoid ligament complexes.

Minimal Achilles tendinosis and a slightly low-lying soleus muscle. No tearing of the Achilles tendon or tendo-osseous insertion. Retro-Achilles and retrocalcaneal bursitis without high-grade tearing of the Achilles tendon or tendo-osseous insertion. No impinging Haglund osteophyte.

Normal plantar fascia without thickening, fibromatosis, tearing, periaponeurotic edema, large calcaneal spur or reactive osteitis at the origin. No denervation atrophy of the abductor digiti minimi.

No evidence of sinus tarsi syndrome. Mild heel pad inflammation.

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.

No tearing of the flexor tendons at the level of the midfoot as it cross and diverge from Henry knot or tearing of the anterior tibial tendon including its insertion.

**IMPRESSION (MRI OF THE LEFT ANKLE and MIDFOOT-peroneal tendon protocol):**

1. **Correlation for snapping or unstable peroneal tendons is recommended given the presence of complete anterolateral dislocation of the supramalleolar and retromalleolar peroneus longus tendon which exhibits low-grade tendinosis, fraying, and mucoid degeneration from the supramalleolar level to the watershed zone and into the cubital tunnel.** No high-grade peroneal tendon tear. There is associated stripping of the superior peroneal retinaculum.
2. Slight, low-grade fissuring of the retromalleolar and inframalleolar peroneus brevis tendon. Spurring of the retromalleolar sulcus which has a concave morphology could be associated with the peroneus brevis tendinopathy. Ill-defined longitudinal fissuring within the peroneus brevis tendon is possible. There is associated paratendinitis. No fracture of the fibula.
3. Potentially associated is evidence of a chronic grade II lateral collateral ligament sprain with attrition of the anterior talofibular ligament. No acute hematoma.
4. No tearing of the medial flexor or extensor tendons.
5. Slight Achilles tendinosis and paratendinitis without tearing of the Achilles tendon or an impinging Haglund spur at the insertion.
6. No hindfoot fracture, advanced arthropathy, or OCD lesion of the talar dome. No midfoot fracture, divergence of Lisfranc joint, or tearing of the Lisfranc ligament. Intact peroneus brevis insertion at the base of the fifth metatarsal.