

Clinical History

59 year old male sustained an ankle injury while playing tennis

The patient reported a “popping sensation” posteriorly followed by severe pain and limited motion

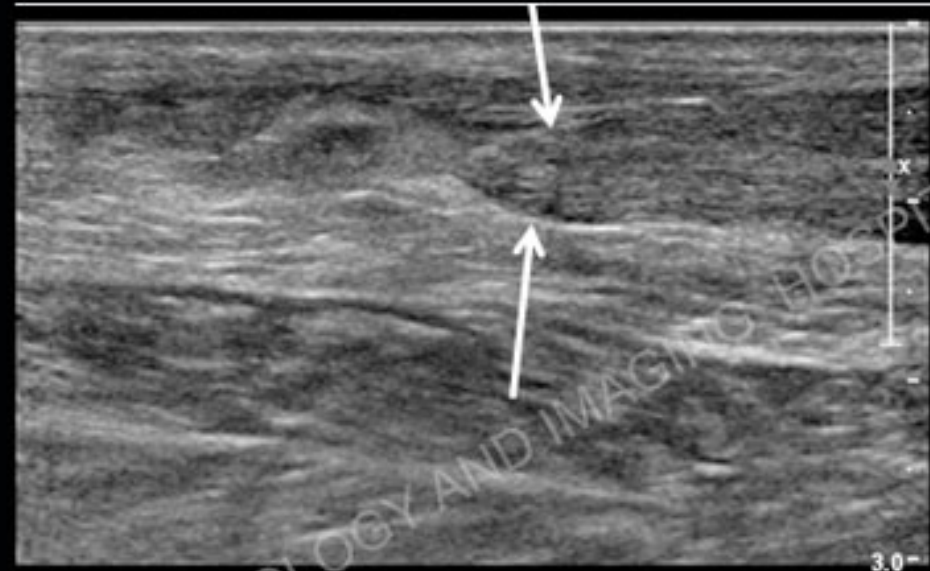




Lateral (a) and AP (b) ankle radiographs demonstrated no fracture. Posterior soft tissue thickening at the level of the Achilles tendon (arrows) was noted. Ultrasound evaluation was requested to evaluate the integrity of the Achilles tendon.

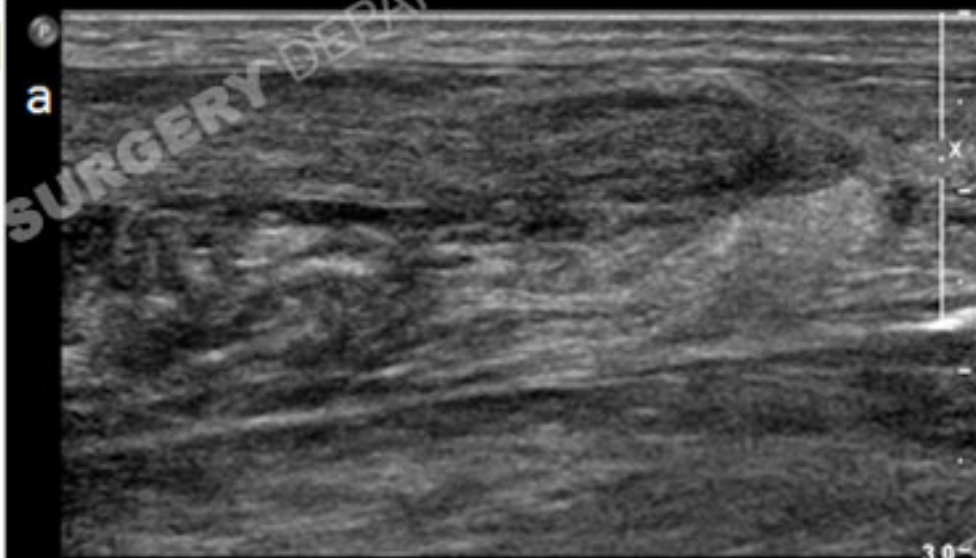


Left Achilles Tendon

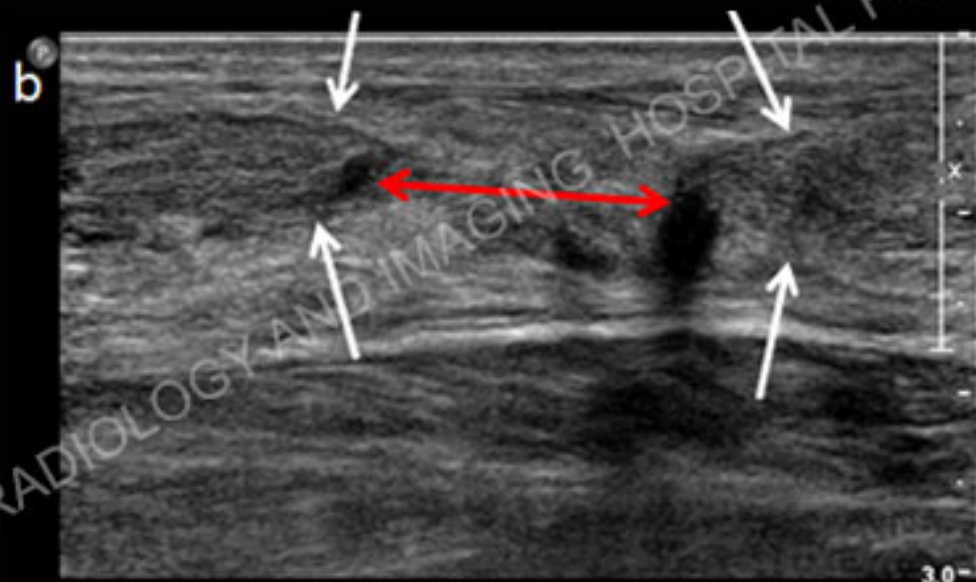


Left Achilles Tendon

Two images obtained more proximally along the Achilles tendon demonstrate an abrupt tapered termination of normal tendon fibers (arrows) reflecting a complete tear of the Achilles Tendon.

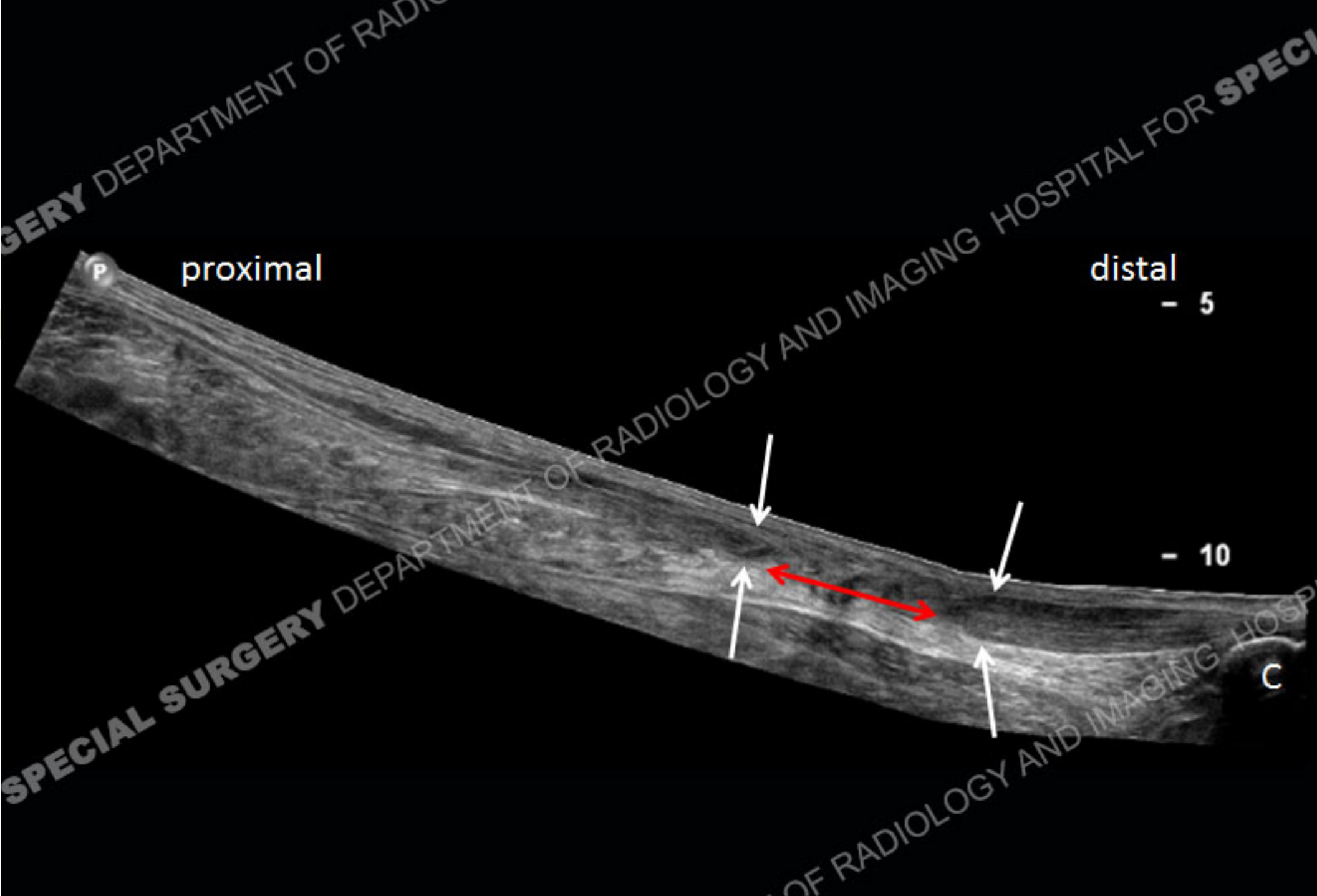


Left Achilles Tendon



Left Achilles Tendon

Two further images more proximally along the tendon. Image a demonstrates abrupt termination of the more proximal tendon fibers (arrows). Image b, centered at the full-thickness tear, demonstrates both ends of the torn tendon (white arrows) and the 2.5 cm gap at the tear site (red arrow).



Extended field of view image, obtained by recording the ultrasound image while moving the probe along the course of the tendon, demonstrates the full extent of the tendon. The tear (arrows) and its relation to the calcaneus (C) is demonstrated. Tendon gap (red arrow) is well demonstrated.

Diagnosis: Full-thickness tear of the Achilles tendon

Achilles tendon tears are common in both the active younger population as well as the elderly

Tears generally occur at the “critical zone” of the tendon, approximately 2-6 cm from the calcaneal insertion, as in this case

Achilles tears are associated with:

- Underlying Achilles tendinosis from repeated low-grade trauma
- Diabetes, rheumatoid arthritis, lupus, gout and other medical diseases
- The recent use of fluoroquinolone antibiotics

MRI is the most commonly ordered imaging study for evaluation of the Achilles tendon

However, in confirming the diagnosis of a suspected Achilles tendon tear, ultrasound is a rapid and relatively inexpensive examination that can accurately diagnose the tear and demonstrate its extent and location

