

Bilateral Ankle Injury – Non-traumatic

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HISTORY: A 59-year-old Caucasian male with an 80-pack-year history of tobacco abuse and COPD reports mild bilateral posterior ankle discomfort while changing the battery in the bottom of his boat. The following day, he notes an acute onset of posterior left ankle pain followed by pain in the posterior right ankle associated with significant gait impairment. He denies any precipitating injury or event. Weeks prior, he reports being treated for an acute COPD exacerbation with several medications. At the time of evaluation, 9 weeks had past from the initial onset of ankle discomfort.

PHYSICAL EXAMINATION: The patient was alert, oriented and in no acute distress. Lower extremity skin was warm and dry without rashes or lesions. There was decreased sensation to light touch in bilateral S1 nerve root distributions. Bilateral gastrocnemius muscles were without masses or tenderness. There was a small, tender palpable defect appreciated in both Achilles tendons approximately 5 cm proximal to their insertion onto the calcaneus. Thompson testing while lying supine was equivocal with slight toe flexion. There was 5/5 strength in both tibialis anterior and EHL muscles and decreased strength in bilateral gastroc-soleus muscles. Distal pulses were intact with brisk capillary refill.

DIFFERENTIAL DIAGNOSIS: 1) Achilles tendonitis 2) Gastrocnemius muscle tear

TEST & RESULTS: Sports ultrasonography demonstrated evidence of extensive tendinosis and complete tendon rupture bilaterally.

FINAL/WORKING DIAGNOSIS: Bilateral acute Achilles tendon rupture

TREATMENT & OUTCOMES: Static and dynamic ultrasound evaluation demonstrated complete discontinuity of both Achilles tendons at the area of tenderness and palpable defect. Interval monthly sports ultrasonography over 3 months showed progressive bridging of the defects with increased scar formation and fiber realignment, representing tendon healing. These morphological changes corresponded directly with improved clinical symptoms and functional capacity. Musculoskeletal ultrasonography can play an important role in the assessment and evaluation of healing during non-operative management of Achilles tendon ruptures.