Ankle Syndesmotic Injury with Posterior Tibial Tendon Rupture

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Background:

Ankle fractures are common – they are the third most common fracture annually in the United States with more than 135,000 ankle fractures occurring per year in the US. Concomitant ankle syndesmotic injuries occur in up to 20% of ankle fractures However, isolated syndesmotic disruptions without fracture, are much less common–about 7,000 per year or twenty-times common than syndesmotic injuries associated with fracture. The incidence of posterior tibial tendon rupture in association with an isolated syndesmotic injury is rare – to our knowledge there are no case reports in the literature of this combined injury.

Purpose:

This video overview and case presentation demonstrates ankle syndesmosis repair with posterior tibial tendon repair.

Methods:

The anatomy, pathogenesis, diagnosis, and treatment options for ankle syndesmotic injury with posterior tibial tendon rupture are reviewed. A case of a 24-year-old healthy, active male presenting with left ankle pain after sustaining a non-contact twisting injury while on vacation is presented. After a thorough discussion of risks, benefits and prognosis, the patient elected to proceed with primary ankle syndesmosis and posterior tibial tendon repair to improve his functional status.

Results:

The ankle syndesmosis and posterior tibial tendon were anatomically restored intra-operatively. Post-operatively the repair was maintained both clinically and radiographically, and the patient returned to his activities at 2 months post-operatively.

Conclusion:

Primary repair of the posterior tibial tendon with anatomic reduction and fixation of the ankle syndesmosis is a viable surgical option for active patients with isolated ankle syndesmotic injury and associated posterior tibial tendon ruptures. This treatment can offer good functional results. Adherence to post-operative rehabilitation is crucial for optimal outcomes.