

Peroneal Tendon Dislocation

Peroneal tendon dislocations are rare and are commonly misdiagnosed as lateral ankle sprains. It accounts for less than 1% of acute ankle injuries (1). They generally occur when the superior peroneal retinaculum is torn which allows the dislocation of the peroneus brevis and longus tendons from the retromalleolar groove. (1). Peroneal tendon dislocation is commonly linked with longitudinal splits in the peroneus brevis tendon and lateral ankle instability (4).

The injury is most common in downhill skiers, ice skating, football, mountaineering, sprinting, basketball and gymnasts and occurs when there is a sudden reflex contraction of the peroneal muscles during an ankle sprain (1)(3). The foot is generally in a dorsiflexed and everted position (3). On examination there is palpable clicking, snapping or crepitus over the posteriolateral aspect of the lateral malleolus with active dorsiflexion and eversion (1). Bruising and swelling may also be present posterior to the lateral malleolus.

There is a dearth of research regarding non surgical treatment of peroneal tendon dislocation. It is argued that due to the relative rarity of the condition and that studies of a high quality are difficult to conduct. Conservative management may be attempted in acute dislocations but it has been shown that high-demand individuals should be primarily managed surgically (2) (4). Postoperatively, a removable boot is recommended for approximately four weeks which is then replaced with a stirrup brace (6). Exercises given to patients are those commonly used on acute lateral ankle sprains i.e. gentle ROM exercises that avoid excessive inversion, proprioception and balance work (1).

Ferran et al (2006) list the five most commonly used surgical techniques as (a) anatomical reattachment of the retinaculum; (b) bone-block procedures; (c) reinforcement of the superior peroneal retinaculum with local tissue transfers; (d) rerouting the tendons behind the calcaneofibular ligament; and (e) groove deepening procedures. They claim that due to the lack of research in this area that it is impossible to say which procedure gives the best results. However, Francesco et al (2009) claim that retinaculoplasty is the best surgical option as it results in less complications and a higher rate of return to sports (2). Operative treatment of peroneal tendon tears is based on the amount of remaining viable tendon. Primary repair and tubularization is indicated for tears involving <50% of the tendon, and tenodesis is indicated for tears involving >50% of the tendon (5).

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3. Dynamic Sonographic Evaluation of Peroneal Tendon Subluxation. Neustadter et al (2004). American Journal of Roentgenology. 183: 985-988.
4. Recurrent Subluxation of the Peroneal Tendons. Nicholas A. Ferran, Francesco Oliva, Prof. Nicola Maffulli (2006). Sports Medicine, 36 (10)p 839-846
5. Operative Treatment for Peroneal Tendon Disorders. Daniel S. Heckman; Sudheer Reddy, David Pedowitz, Keith L. Wapner, Selene G. Parekh. The Journal of Bone & Joint Surgery, Volume 90, Issue 2
6. Peroneal Tendon Subluxation in Athletes: Fibular Groove Deepening and Retinacular Reconstruction. David Porter, John McCarroll, Erin Knapp, Jennifer Torma (2005). Foot & Ankle International. vol. 26 (6),p 436-441