

ORTHOARIZONA

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Flexor Hallucis Longus Tendonitis/Posterior Impingement Non-Operative Protocol

The flexor hallucis longus (FHL) runs in a groove in the posterior talar process between the medial and lateral tubercles. The lateral process is larger and often has a separate ossification center. This normally fuses to the lateral tubercle. If it remains separate, it is called the *os trigonum*. FHL tendonitis often results from acute plantarflexion injury or chronic repetitive overuse. It is frequently seen in dancers or other athletes that perform excessive plantarflexion movements. It is manifested as posterior medial ankle pain, arch pain or great toe discomfort. Clicking or locking of the great toe, pain, swelling and crepitus posterior to the medial malleolus may also be present. FHL tendonitis pain may be evoked by dorsiflexion of the ankle with forced plantarflexion of the great toe. Posterior ankle impingement is manifested by pain in the posterior aspect of the ankle and can occur with or without FHL tenosynovitis. It may be due to an os trigonum, thickened posterior capsule, calcific debris, instability or a large posterior calcaneal process. In repetitive plantarflexion these structures can be compressed between the calcaneus and tibia causing inflammation and pain. Pain is reproduced with forced plantarflexion of the foot or forced dorsiflexion of the great toe while in full ankle plantarflexion. In posterior impingement, tenderness is usually posterior lateral whereas FHL tendonitis is posterior medial.

General Rehabilitation Guidelines

Treatment is usually conservative. Initially:

1. NSAIDS
2. Ice
3. Active rest
4. Avoidance of excessive plantarflexion, heel lifts or heel raise exercise
5. Achilles stretches (address tightness at ITB, HS and Piriformis as well)
6. Ultrasound, phonophoresis, iontophoresis
7. Soft tissue mobilization to stress the posterior capsule
8. Subtalar joint mobilizations (also to stress posterior capsule)

As symptoms decrease:

1. Progress with above as necessary
2. Initiate open and closed chain exercises (theraband, cuff weights, weight shifts to lunging sequence, sportcord etc)

3. Proprioception exercises (diagonal doming, SLB sequence, BAPS, rockerboard with and without perturbations etc.)
4. Training modification (avoid excessive pronation, “rolling in”)
5. Include hip and buttock strengthening to progression (Piriformis/ITB important to train)
6. Orthotics to prevent excessive pronation

***Stress proper foot mechanics with all closed chain acti**