Tibialis Posterior Myofascial Tightness as a Source of Heel Pain: Diagnosis and Treatment

Catherine E. Palta, PT, DHSc, OCS, MTC, FAAOMPT & J. Haxby Abbot, MScPT, DipPhty, MTC, MNZCP

Immediate pain on weight bearing in the morning, pain that decreases during the day, and a feeling like there are stones and pebbles under the heel are common complaints. Is it plantar Fascitis? Maybe not.

There are three defined stages of posterior tibialis tendonitis, according to Johnson and Strom.
Stage 1 – peritendonitis, tenosynovitis, tendinosis, paratendinitis with no tendon elongation.
Stage 2- Partial tear with tendon elongation. Stage 3 Complete rupture of tendon. Note all stages involve swelling and tenderness of tendon, with increasing amounts of weight bearing rear foot evasion. In the first two stages a single heel rise can be performed, but the calcaneous lacks inversion; stage 3 the heel rise cannot be performed secondary to pain.

In this article Patla describes a Pre Stage 1 condition described as posterior tibialis myofascial dysfunction. Neither tenderness, nor swelling is involved, decreased ROM with single heel rise, and inversion is lacking. In weight bearing calcaneous is in a neutral or inverted position with depression of the medial arch. Gait analysis reveals lack of push off, and foot flat postures. The patient will demonstrate difficulty maintaining stability of the 1st ray during PF. There will be full PROM, and ratios will be normal. To test the length of the muscle, the patient is prone with knee flexion to 90°, one hand contact maintains the ankle in full DF, and EVR, and the other hand places P/A force on navicular, and the bases of the 2nd, 3rd, and 4th metatarsals. With this length test, there will be a reproduction of heel pain. If the practitioner fails to engage both pulleys of the tib post, this technique for assessment and treatment will be ineffective.

Tibialis posterior dysfunction may mimic or cause plantar fascitis, shin splints, excessive forefoot pronation, patella femoral pain, and greater trochanteric bursitis. Secondary to this, the myofascial tightness must be assessed and treated by a skilled PT, using manual techniques and functional neuromuscular re-education. Self stretching techniques have been proven non-effective.

Reviewer: Lisa Perkins, PT, OCS, MTC

‘Physical Therapists for the Frederick Keys’
84 Thomas Johnson Court, Suite B, Frederick, MD 21702   301-662-8541   fax 301-662-8762