



Physical Therapy Update

The clinical staff at Frederick Sport and Spine Clinic regularly reviews articles, discusses the content and implements the information into our patient treatments. As a service to the local medical community, we are offering a summary of these articles to Physicians and Medical Practitioners. It is our intention to provide only the most pertinent info in these ½ page summaries. Further info is available at the clinic. Please take a moment to peruse the information below and contact us if you have any questions about the subject matter. Enjoy!

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

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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 Fasciitis? 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 eversion. In the first two stages a single heel rise can be performed, but the calcaneus 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 calcaneus 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 fasciitis, 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

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