Background

The posterior tibial muscle and tendon help stabilize the ankle. They are responsible for pointing the foot in and down. Posterior tibial tendinopathy includes both “tendonitis” (a condition involving inflammation of the tendon) and “tendinosis” (a condition involving degeneration of the tendon over time). For the majority of athletes, such as in runners, dysfunction of the tendon occurs gradually due to overuse and over-pronation. Less commonly, such as in dancers, it can occur suddenly due to overloading of the tendon. In both cases, individuals with flat feet (a condition known as pes planus) are more prone to this condition.

Symptoms usually develop over a period of time and most commonly are described as pain behind the inside ankle bone, especially with walking or lifting up the foot. The pain may sometimes travel up to the back inside of the calf. If not addressed, there can be further flattening of the foot arch followed by a gradual worsening of the symptoms.

Sports Medicine Evaluation and Treatment: The physical exam will reveal tenderness over the inside ankle and foot as well as difficulty with tip-toe walk and single heel-rise. Imaging studies need not be obtained in order to make this diagnosis, but x-rays or magnetic resonance imaging (MRI) may be ordered to rule out other conditions (e.g. stress fractures or flexor hallucis longus, FHL, tendon injuries).

Similar to many other conditions that involve inflammation of a tendon or muscle, it is recommended to begin with RICE therapy (i.e. Rest, Ice, Compression, and Elevation). Anti-inflammatory medications (such as ibuprofen or naproxen) can be used to treat the pain, but physical therapy remains the cornerstone of treatment in order to restore ankle strength, balance, and flexibility. In severe cases, immobilizing the leg in a short leg cast or walking boot for two to three weeks may be considered. Surgery is rarely needed.

Injury Prevention

It is important to properly prepare for any new exercise or sport. Fast changes in activity levels place people at risk for tendon injuries. For people with flat feet, it is worth considering orthotics for arch support.

Return to Play

An individual can return to his/her sport or activity once they have completed rehabilitation and can perform sport-specific maneuvers. It is important not to try to return too early, as this can lead to reinjury, or in severe cases, rupture of the tendon, requiring surgery. Foot orthotics may be helpful to decrease pronation, and taping the ankle prior to activity can provide additional support to the arch.

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References
