

Posterior Tibial Tendon Dysfunction

The posterior tibial tendon attaches the calf muscle to the bones on the inside of the foot. The main function of the tendon is to hold up the arch and support the foot when walking. Changes in this tendon impair its ability to support the arch of the foot causing a progressive problem if left untreated increasing limitations on walking, running or other activities.

Posterior tibial tendon dysfunction (PTTD) occurs when the posterior tibial tendon becomes inflamed or torn due to overuse or injury. A cycle of inflammation and rebound can lead to scarring if not properly recognized and treated and the scarred portion of the tendon can become thickened and form nodules. As a result, the tendon may not be able to provide stability and support, resulting in loss of arch height, compromising the structure, function and motion of the foot and lower extremity and the possibility of impaired walking.



Patients may notice

- A swelling along the posterior tibial tendon

- A change in the shape of the foot with the heel splaying outward instead of being in line with the toes
- Restricted mobility
- Pain on the outside of the ankle or along the back and inside of the foot and ankle

Treatment may include monitored anti-inflammatory medications. A walking boot can be used to immobilize the foot and ankle and resolve the initial pain and inflammation. A physician prescribed custom-made orthotic or custom-made brace may be indicated to control the foot and assist with biomechanical functionality. All of the above may contribute to relief of symptoms but may not work as anticipated due to contributing factors. All treatment options require diligent follow-up.

Risk factors include obesity, diabetes, hypertension and aging as tendons are made of collagen and the individual strands of collagen that make up the tendon can weaken and wear down or rupture over time or if stressed. The condition can also occur if you recently broke (fractured) your ankle or dislocated it.

Posterior tibial tendonitis (PTTD) that has not responded to non-surgical methods may be considered for podiatric surgical correction.

Cortisone injections are used to treat many types of inflammation, but they are not typically used to treat tendonitis. An injection into the tendon carries a risk of rupture, and is therefore not recommended.