Posterior Tibialis Tendonitis

The posterior tibial tendon is one of the major supporting structures of the foot. It is a fibrous cord that starts in the calf muscles, stretches down behind the inside of the ankle and attaches to a bone in the middle of the foot. That bone, the navicular, is a key structure in the arch of the foot. The posterior tibial tendon has an important role because it helps keep the navicular in its proper place to hold up the foot's arch, and it provides support as a person steps off the toes when walking.

What causes posterior tibial tendonitis or tears?

Posterior tibial tendon problems can occur for a variety of reasons, including:

- Overuse: Overuse symptoms occur after activities that use the tendon, such as walking, hiking or climbing stairs, especially when a person is not used to such activities.
- Degeneration: Long-term wear and tear can lead to tendonitis or a tear.
- Trauma: A traumatic injury to the tendon can occur with a blow to the inside of the ankle or with a twisting injury. This is more likely for athletes involved in sports such as basketball, soccer or hockey. Excessive force placed on the foot, such as running on a banked road or track, can cause problems, too.

What is the treatment?

Rest from activity, ice, anti-inflammatory medication, and rehabilitation exercises.

Rehabilitation Exercises

Ankle Circles
Sitting in a chair, cross your injured leg over your other leg at the knee. Circle your foot around in a big circle one way and then reverse it the other way. Start with 10 circles each way.

Ankle Flexion
Sitting in the chair still with your legs crossed, flex your ankle so your toes come towards your knee. Hold for a few seconds, now point your toes and hold that for a few seconds. Start with 5 - 10 and build to 3 sets of 10 repetitions.
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Inner Ankle Lift

Sit cross-legged with your injured leg on top (ankle over knee). Slowly raise your foot up and down by flexing (inversion) and extending (eversion) your ankle. Perform five to 10 repetitions for 3 sets and rest briefly between each one. Stop immediately if you experience any pain or discomfort. If you experience no pain, this exercise can be made more challenging by adding weight. You will need a normal shopping bag with handles and some kind of weight; one to two cans of soup are sufficient. Hang the shopping bag handle over your foot and perform the exercise as above.

Toe Grasps

Stand shoeless and sockless with your feet hip-width apart. Lift the ball of your left foot off the ground, curling the toes underneath your foot. Alternate to curl the right toes under your feet. Repeat this exercise, alternating each foot to work the toes, performing 30 on each side. Rest for 30 seconds, then repeat for an additional set.

Heel Raise / Calf Raise

The calf muscle at the back of your leg offers support to the posterior tibial muscle, and can help distribute the weight load if it is strong. Calf raises will help strengthen the calf and rehabilitate your posterior tibial muscle. Simply stand with your feet parallel to one another and raise up onto the balls of your feet. Hold that position momentarily and return to the starting point. Only do five repetitions and increase as you get stronger. Stop immediately if you experience any pain or discomfort.

Variations:

- If painful doing exercise from standing position can start by doing in a seated position.
- Two legs on way up and one (injured) on way down as slow as you can to work posterior tibialis in an eccentric movement.

Heel Walks

Stand next to a wall or other stable area that you can use for balance. Turn your feet out slightly and then lift the balls of the feet off the floor, leaving only the heels on the ground. Maintain this position as you walk around a room, working your way up to walking like this for two minutes.

Toe Walking

Stand next to a wall or other stable area that you can use for balance. Lift your heels off of the ground and walk forward on the balls of your feet, working your way up to two minutes.