

Posterior Tibialis Tendon Dysfunction Exercises

Mobility/Compression Bands

Although there are different mobility band brands available, I have had luck using the **Rogue Fitness VooDoo X Bands** and the **EDGE Mobility Bands**. There are many variations of how the bands can be used as a mobility and treatment tool. Below is an example of one method I use when treating posterior tibial tendon dysfunction (PTTD).

The use of mobility bands affects blood flow to the area and speeds up healing. Mobility bands also help reset some of the receptor cells in the muscle tissue that cause excessive muscle tightness. Always wrap the band with at least 50-75% stretch. **The entire treatment should last only a couple of minutes. If you start to experience numbness, tingling, excessive pain or your foot turns completely white, please discontinue the treatment.**

After completing this sequence, remove the mobility band. Move your ankle around to restore motion and blood flow. As long as your symptoms don't worsen, you may utilize the mobility bands several times during the day. *(If you suffer from any form of blood clotting disorder or are on blood thinning medications, I would advise against utilizing mobility bands for any type of aggressive, deep compression.)*

Mobility Band - Mid Foot Variation

Depending on the area of pain, you may need to start wrapping the mobility band on your mid foot or the bottom of your ankle. Starting **mid foot**, wrap the mobility band with 50-75% stretch. Tuck the end of the mobility band inside the part that has already wrapped.



Mobility Band - Mid Foot Variation

Sit with your ankle unsupported and free floating. With the mobility band in place, pump your ankle back and forth for as much motion as possible in each direction.

Perform for approximately 30 seconds or for approximately 15 repetitions. Remove the mobility band.



Self-Mobilization – Using a Lacrosse and/or Tennis Ball

Be sure to mobilize the tissue in and around the shinbone (tibia). You could also use a tennis or lacrosse ball to aggressively work out the tissue along the shin. Take care not to be too aggressive when mobilizing the posterior tibialis tendon initially or you may make the pain worse. Initially focus on any other mobility and myofascial restrictions in the lower legs (as demonstrated in **Lower Extremity Mobilizations using a Foam Roll**).

Double Ball Mobilization along the Tibia

Place lacrosse or tennis balls above and below the edges of the tibia and fibula bone. Try to keep the pressure directly over both of the balls. Gently move the balls around and hold over the tender areas.

Perform 1-2 minutes on each leg once per day.



Ankle Resistance Exercises – Using the Elastic Exercise Band

The following basic ankle strengthening exercises utilize a **Thera-Band Exercise Band**. The red band is shown and is one of the lighter resistances available. Work on these exercises until you can utilize at least the green band (or beyond for more resistance).

- You may have a friend or family member hold the elastic band for you (and not tie it to a table as shown). Please remember if you tie the elastic band, then it must be tied to an object that will not move.
- With these exercises, remember to move slow and under control. There should never be more than a mild to moderate increase in discomfort while performing these exercises.

Elastic Band Plantarflexion

Start with your foot in a neutral position.

You may also use the elastic band as a way to stretch your foot up toward you (similar to a standing calf stretch).

While seated, use an elastic band attached to your foot and press your foot downward and forward.

Perform 2 sets of 10-15 repetitions, 1-2 times per day on both feet.

You may have your foot suspended on a chair or stool or with your heel resting on the ground.



Elastic Band Dorsiflexion

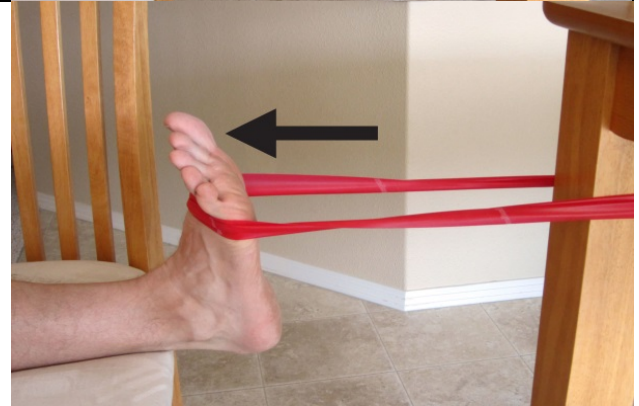
Start with your foot in a slightly flexed position.



While seated, use an elastic band attached to your foot and draw your foot upward.

Perform 2 sets of 10-15 repetitions, 1-2 times per day on both feet.

You may have your foot suspended on a chair or stool or with your heel resting on the ground.



Elastic Band Inversion

This is a critical exercise to perform as it directly works the affected posterior tibialis tendon.

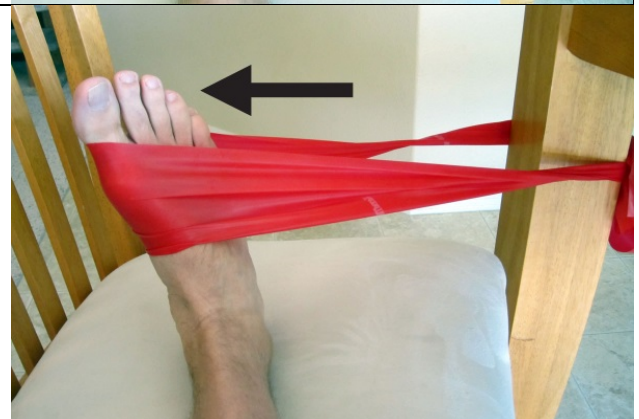
Be sure to work on *eccentric control* (meaning you return to the starting position very slowly and under control).



While seated, use an elastic band attached to your foot and draw your foot inward.

Perform 2 sets of 10-15 repetitions, 1-2 times per day on both feet. Work on *eccentric control* as you return to the starting position. *Spend at least 5 seconds to return your foot to its starting position.*

You may have your foot suspended on a chair or stool or with your heel resting on the ground.



Elastic Band Eversion

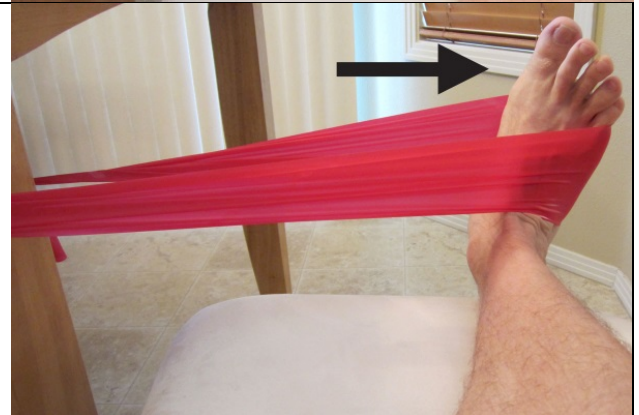
Start with your foot in a neutral position.



While seated, use an elastic band attached to your foot and draw your foot outward to the side.

Perform 2 sets of 10-15 repetitions, 1-2 times per day on both feet.

You may have your foot suspended on a chair or stool or with your heel resting on the ground.



Ankle and Foot Strengthening Exercises

Foot Intrinsic Muscle Strengthening

Place a small towel flat on the floor. A slick non-carpeted floor tends to work best. Try to grab and crinkle the towel by using your toes. Be sure to extend the toes and grab as much as the towel as possible before attempting to grab it again.

Perform 3 sets of 10 repetitions on each foot once per day.

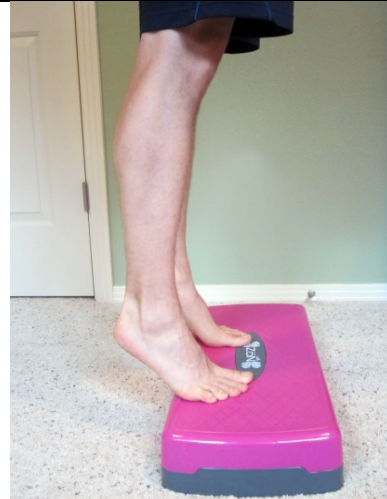


Heel Raises - Starting Position

A key exercise is the heel raise. The emphasis should be on the *eccentric control* (meaning when the muscle is lengthening or contracting eccentrically).

In this exercise, the starting position is up on the tip toes. The important component is the slow lowering of the heels. Spend several seconds to lower down the heels. Discontinue this exercise if your pain worsens.

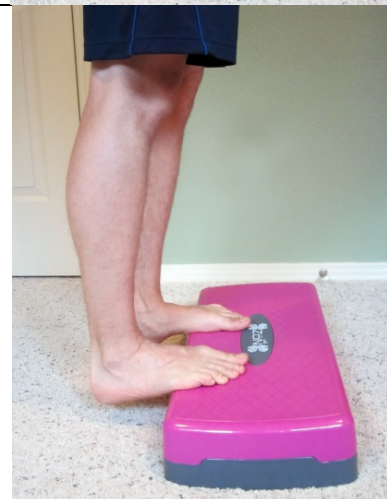
I recommend **1 second up and taking 5 seconds when coming down.**



Heel Raises - Ending Position

For normal strength, you should be able to perform 25 repetitions on one foot while using a counter top for minor balance only. As you work on your ankle and plantarflexion strength, start slowly as to not aggravate the painful area.

Initially perform with both feet. 10 repetitions at a time, up to 3 sets of 10 repetitions once per day. As your pain level decreases and your strength increases, progress to one foot only and increase the repetitions.



Balancing Activities

Balance and proprioceptive activities are an important component to a comprehensive rehabilitation. Single leg balance activities improve the ankle, foot, and lower leg strength. It also works on proprioceptive input which is critical for your body awareness. Poor proprioception can affect foot placement when running. It can also be a risk factor for developing other lower extremity running injuries.

Balancing on One Foot

While standing near a counter top, stand on one foot. Use your hands on the counter top as needed to maintain your balance. Maintain a proper upright posture. The softer the surface you stand on, the more difficult the balance will be.

Hold for 30 seconds, and 3 repetitions per side.

