





Tibialis Posterior Tendinopathy

Airedale NHS Foundation Trust Bradford Teaching Hospitals NHS Foundation Trust Bradford District and Crayen Clinical Commissioning Group

Introduction

Tibialis Posterior tendinopathy or tendonitis occurs in the tendon that runs around the inside of the ankle joint. The Tibialis Posterior muscle is an important stabiliser of the foot and helps maintain the arch of the foot. It also turns the foot in (inversion) and assists in pointing the foot down (plantar flexion).

What is Tibialis Posterior Tendinopathy?

Tendinopathy is a failed healing response of the tendon. Rather than the normal healing taking place to where the tendon is healthy the repaired process fails with disruption of the tendon structure leading to pain and swelling.



Causes of a Tibialis Posterior Tendinopathy

Our tendons (which attach muscle to bone) undergo various stress and strain during our day to day activities. They adapt and recover from these on a daily basis. When the demand placed on these tendons exceeds their recovering capability they can become painful.

We understand that multiple aspects affect the demand as well as the recovery of these tendons. If the demand we place on the tendon is higher than its capacity to recover in the given time, the tendon can become painful. As we get older the recovery of the tendons slows down too. We also know that a lack of muscle tone, stretching and compression of the tendon can make the pain worse.

Conditions such as diabetes, hypothyroidism, obesity, previous surgery and ankle trauma can contribute to developing a tendinopathy.

Symptoms of Tibialis Posterior Tendinopathy

- Pain and swelling over the inside of the ankle joint, that can run down to the arch of the foot
- This is often worse first thing in the morning, or after a period of rest, and can ease after a short period of activity
- Prolonged standing or walking can make the pain worse
- There may have been an increase in activity, such as walking, before the pain starts
- There may have been a change in footwear
- Sometimes the tendon can rupture, particularly in diabetic patients which will cause a sudden collapse in the arch, or a flat foot

Diagnosis of Tibialis Posterior Tendinopathy

The diagnosis of Tibialis Posterior tendinopathy can be made on examination, looking for pain and swelling over the course of the tendon

Occasionally an ultrasound scan can be useful in confirming the diagnosis if there is any doubt

Self management of Tibialis Posterior Tendinopathy

Initially reducing the demand that is placed on the tendon is important as it helps the tendon to recover, e.g., Limiting running distance, certain exercises as well as daily activity that causes pain. Gradually reintroducing the demand on the tendon and exercises in a graded fashion helps to increase the tendons capacity to deal with the demand

In chronic tendon injuries, making the tendon work (mechanical loading) has also been shown to stimulate the healing process which promotes repair and remodeling of the tendon structure back to a health state although this can take a long time. Progressive graded exercises that load the tendon at the rate it can tolerate are very important.

As tendons do not have a good blood supply they are slow to respond to treatment and make take a number of months to get better.

Return to Sport with Tibialis Posterior Tendinopathy? When comfortable to do so and under guidance from your physiotherapist.

Other treatments include;

- Weight loss (https://www.nhs.uk/live-well/healthy-weight/start-the-nhs-weight-loss-plan/)
- Ice
- NSAID

- Footwear
- Insoles
- Modification of work or activity

Exercises for Tibialis Posterior Tendinopathy

Exercise 1: Ankle inversion - exercise band



- Start by lying on your back or sitting.
- Cross your unaffected leg over the unaffected leg.
- Place a looped elastic band around both your feet.
- Next, turn your target ankle away from the other foot and pull the band.
- The other foot doesn't move, it just acts as an anchor.

Exercise 2: Single Leg Heel Raise



- Put your hand on a wall or other stable surface for balance.
- While standing on one leg, raise up on your toes as you lift your heel off the ground.
- Keep your knee straight.

Exercise 3: Single Leg Balance



- Stand on one leg.
- Hold your balance in this position.
- Perform this next to a table or other sturdy object.

Exercise 4: Calf Stretch



- Stand with your injured leg back
- In a step standing position
- Stretch your leg keeping your knee straight
- Fell the stretch in the back of your calf. Hold for 30 seconds

Exercise 5: Toe Curls with Towel



- Sit on a chair.
- Smooth the towel out and place one foot on it, flat.
- You are going to be moving the towel toward yourself, so have extra fabric in front of your toes.
- Keeping the heel still, pull the towel toward you by scooping it in with your arch and toes. Use both sides of your foot (all five toes) and try to create a deep dome under the arch area.
- You will only get a little bit of the towel to move each time you extend and pull back.

What next?

If you are still experiencing symptoms despite following the above advice, it is important you seek advice from your GP. Your GP may decide to refer you to the musculoskeletal clinic or to a physiotherapist.

Other treatments for Tibialis Posterior Tendinopathy?

- Extracorporeal Shockwave therapy (this is not currently available via the NHS locally)
- Corticosteroid injections, although this does come with the potential complication of tendon rupture
- Surgery in extreme cases that do not respond to conservative manage.