Nottinghamshire Integrated Care System

Tibialis Posterior Tendinopathy

Information in this booklet is intended to be used as a guide. It gives you an idea about how *Tibialis Posterior Tendinopathy* can be managed.

You should remember that every case is different, and symptoms and management can vary from person to person.

Tibialis Posterior Tendinopathy

***Tibialis Posterior Tendinopathy* can be a painful condition affecting the inside of your ankle around your 'ankle bone'. It can lead to a reduction in the arch support around the inside of your foot. This can cause 'flat feet', as well as swelling and pain in this area.**

The condition is often due to an increase in loading such as more walking or even running. It is not something to be worried about, however often it does not get better on its own and typically requires some treatment. The first line of treatment includes physiotherapy-led strengthening exercises. Other effective treatments you can complete at home are highlighted in this booklet.

This booklet will provide further information on the condition and then some treatments and exercises to help the process of reducing pain and aiming to return to normal activity.

What is Tibialis Posterior Tendinopathy?

The *Tibialis Posterior* is a muscle in your lower leg around your calf, which helps to point your toes and turn your foot inwards. The muscle also helps to support the natural arch in your foot. The muscle runs down the inside of the lower leg and then travels around the ankle, before attaching to bones underneath the arch of your foot.

A tendon is a tough structure that attaches a muscle to a bone. Tendinopathy is a term used to describe inflammation in or around the tendon. It can happen when the tendon struggles to cope with the load or what you are asking it to do.
This can be because the amount it is being used has increased and it has not adjusted or because it is deconditioned. This can make activity, especially weight bearing, difficult and sore.

Tendinopathy is when there is inflammation in or around the tendon structure. With any tendinopathy (inflammation of the tendon) the muscle can have a reduction in its ability to stabilise and support the arch of the foot. This places more stress on other structures involved in maintaining the arch of the foot, such as ligaments, which can also become painful. Once the tendon becomes inflamed, or there are small tears present, the arch can slowly reduce over time resulting in a 'flat foot'.

Why me?

Tibialis Posterior Tendinopathy is often due to a recent increase in activity or overuse. With excessive or repetitive loading through activities such as running and walking, micro-tears occur within the tendon more quickly than the body can repair them. This can result in tendinopathy (inflammation of the tendon) and can cause pain, swelling and reduced function. Sometimes it can be hard to identify why it has happened and may have developed more slowly over time.

Anybody can get *Tibialis Posterior Tendinopathy,* however some factors contribute to its development:

- Flat feet/shallow arches
- Age
- Activity levels
- Other risk factors include obesity, diabetes and certain inflammatory conditions.

If you already have quite flat arches, then you are more likely to develop symptoms. The condition tends to be more commonly seen in woman over the age of 40, however men can still get symptoms.

Overuse is a very common cause and people who do a lot of walking or high impact sports are more likely to experience problems. If the load and impact on the tendon is higher then you are more likely to develop symptoms. People who are obese have a higher risk factor of developing these symptoms.

Symptoms

The symptoms typically come on gradually and can vary in intensity. The symptoms will normally worsen over time and do not normally improve on their own without some form of treatment.

- Initially you may be aware of a discomfort and/or swelling behind the ankle and along the instep
- The pain may become worse, particularly with increased weight-bearing
- High-intensity or high-impact activities, such as running, can be very difficult. Some people can have trouble walking or standing for long periods
- You may become increasingly aware of your foot becoming flatter through time
- You may begin to experience pain on the outside of your foot and ankle, as the change in foot position places increased stress between the bones in this part of the foot.
- In the later stages you may find that, on the affected side, you are unable to stand on one leg and raise your heel.

Diagnosis & Investigations

***Tibialis Posterior Tendinopathy* is diagnosed from the signs and symptoms that you describe. Assessment of the foot, ankle and knee by a health care professional may help to inform this diagnosis. If the diagnosis is unclear, then an X-Ray or ultrasound may be performed to aid the diagnosis.**

Blood tests are not used to diagnose *Tibialis Posterior Tendinopathy,* but they may be used to rule out other contributing factors.

Will it get better?

Your symptoms can often be managed with advice and exercises from the physiotherapist. Most cases will resolve with conservative treatment within 3-12 months.

Treatment is aimed at:

- Reducing pain and inflammation, and promoting healing
- Restoring strength and normal movement
- Improving and normalising function.

The tendon can get stronger and soft tissue can normally heal well with the right treatment and advice.

We work with a team of Orthopaedic Advanced Practitioners and Consultants, however steroid injections and surgery are rarely advised for treatment and management of *Posterior Tibialis Tendinopathy.*

Management

***Tibialis Posterior Tendinopathy* is treated with a variety of different management techniques. Below is a list of ways you can help yourself.**

- **Rest:** It is recommended that you avoid excessive standing/walking during recovery. You should stop high impact activities until your symptoms improve
- **Footwear:** This can play a major role in recovery. Good quality walking boots that offer support both to the arch of the foot and around the ankle are recommend if walking or on your feet for long periods. Avoid wearing unsupportive footwear such as flipflops.
- **Medication:** Pain relieving medication such as Paracetamol, or medication to help reduce inflammation such as Ibuprofen, can be helpful. It is best to consult a pharmacist for advice on whether these are suitable for you
- **Ice:** This will help to reduce the pain and swelling. An ice pack, or ice/small frozen vegetables wrapped in a towel is ideal (do not apply ice directly to the skin as this may cause an ice burn

  Apply for 10-20 minutes. This can be repeated several times per day, though leave at least two hours between applications.

MEDICATION FOR PAIN CONTROL

Controlling your pain allows you to continue to function and helps you cope. Your GP may have already discussed medication to help with your pain and the correct ways to take pain relief. They may recommend that you take it as a short course rather than 'as and when' the pain is bad. This often includes non-steroidal anti-inflammatory medication such as Ibuprofen, Paracetamol or Zapain. Anti-inflammatory gels can also be trialled. Please always read the instructions before using these products.

PHYSIOTHERAPY

Specific exercises to rehabilitate and strengthen the inflamed tendon can help you to return to your previous levels of activity. This intervention is recommended once the tendon has healed to a degree that will cope with loading of the tendon. Further exercises for the lower limb including knee and hip can also help (see exercises).

SURGERY

Most cases will resolve with conservative (non-surgical) management. However, should the problem persist, surgery may be indicated but this is rare. There are several different surgical approaches for repairing a damaged Tibialis Posterior tendon. There are potential complications from surgery, and recovery takes months. For this reason, surgery is only considered if the symptoms have not improved after six months of appropriate conservative (non-surgical) treatment.

ORTHOTICS & PODIATRY

You may be referred by your health care professional to see a podiatrist or an orthotist who are specialists in the foot and ankle. These services may offer:

- **Foot Orthoses (insoles):** These can help to reduce the stress put on the injured tendon. A podiatrist can provide foot orthoses modified to your specific needs
- **Ankle Brace:** This may be required if a level of support is required that cannot be gained from footwear and foot orthoses alone.

EXERCISES

The following exercises can be done at home. The number of repetitions is a suggestion. If it is painful, then you can simply reduce how mang you do or how often you do them.

LEVEL 1

- Stand with your feet hip-width apart
- Keeping the toes relaxed and flat on the floor, lift the arches in your feet - you may feel your thighs turning out when doing this
- Hold this position for 10 seconds and then relax
- Reset your feet and repeat the exercise
- Repeat the above 10 times for a total of three sets.

LEVEL 2

- Stand with your feet hip-width apart and your toes slightly pointing outwards (stand in front of a table if necessary)
- Keeping your chest up, bend your knees to perform a small squat
- Do not allow the arch in feet to collapse
- Stop if you feel you are losing your foot position
- Return to the stand position and repeat the exercise
- Repeat the above 10 times for a total of three sets, trying to increase the depth of your squat as you improve.

EXERCISES

LEVEL 3

- Stand with your feet hip-width apart
- Allowing your knees to bend slightly, lift the heels to stand on your toes while maintain the position of your foot
- Stop if you feel you are losing your foot position and reset
- You may need to be positioned to hold on to something for balance
- Hold the position for 10 seconds
- Repeat the above 10 times for a total of three sets
- To progress this exercise, put a tennis ball between your heels and gently squeeze your heels together to hold the tennis ball as you lift to stand on your toes.

STRETCH

- Standing, place the affected foot behind you
- With both feet pointing straight ahead, keep the back heel down and knee straight
- Lean forwards on the good leg to feel a stretch in the calf muscle of the affected leg
- Hold this position for 10-15 seconds
- Release and repeat three times.

EXERCISES

STRENGTHENING - GLUTE BRIDGES

- Lie on your back with your knees bent and arms to your side
- Clench your buttock muscles and lift your bottom off the floor/bed
- Keep your back straight avoiding overarching as you complete the movement
- Hold the position for a few seconds and then lower
- Repeat the above 8-12 times.

STRENGTHENING - CLAMS

- Lie on your side with your bad foot on top of the other
- Bend your knees slightly (as in the picture)
- Pull in your lower tummy muscles to brace your core
- Keeping the feet together, lift the top knee as high as possible (but do not allow yourself to roll back)
- Hold the position for a few seconds and then lower slowly
- Repeat the above 8-12 times.

MSK + together
An integrated MSK service for Mid-Nottinghamshire