Patient Information leaflet about Painful flat foot

Posterior Tibialis Tendon Dysfunction (PTTD)

The aim of this leaflet is to give you some understanding of the problems you have with your ankle, foot or leg and to provide some advice on how to manage this. It should be used along with information you may be given by your healthcare professional.

A common cause of painful flat foot is:

A sudden loss of strength in the Tibialis Posterior muscle and tendon is thought to be the most common cause of an adult flat foot deformity. This can be due to an injury, wear and tear or an inflammatory condition like arthritis.

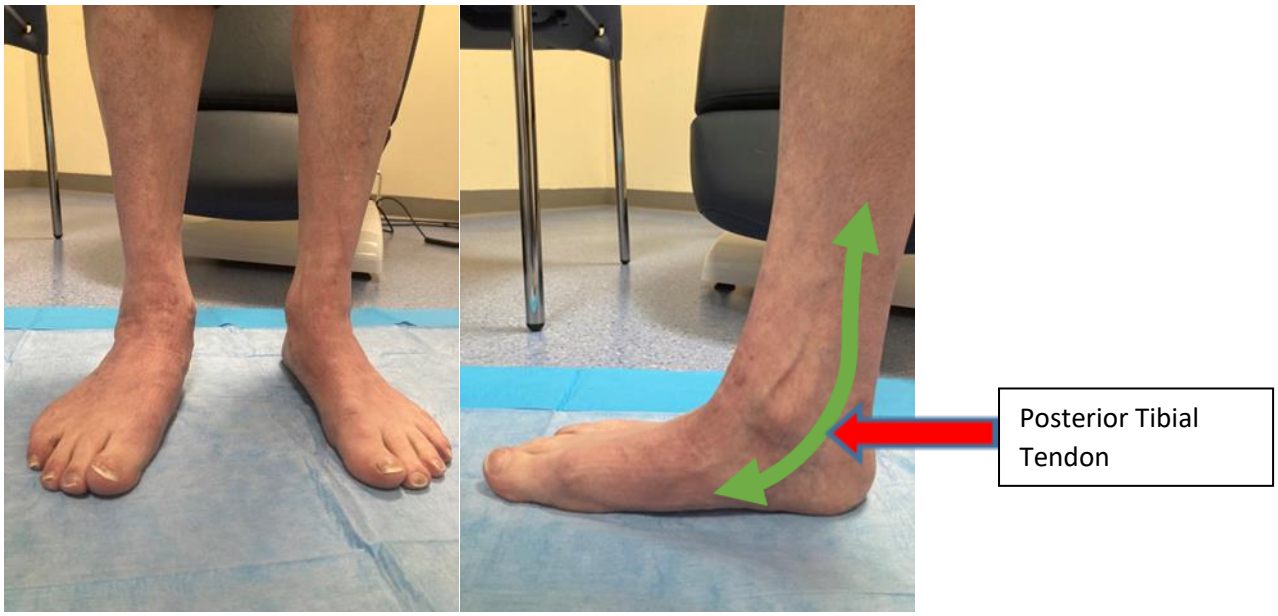

Figure 1: Painful Flat Foot

This posterior tibial muscle comes from the back of your leg and travels down the inside of the ankle joint and attaches into some of the small bones on the sole of the foot. The main purpose of this muscle is to stabilise the arch of the foot and help the transfer of weight from the back of the foot to the front while walking.

What are the possible symptoms of painful flat foot?

• Discomfort and, or swelling in the inside of the ankle

• You may notice that you are unable to maintain your normal activity levels

• Poor balance

• Flattening of the arch of the foot

• Difficulty going up on tip toes

What may contribute to causing these symptoms?

• Being overweight.

• Spending long periods standing or walking, especially a sudden increase in these activities.

• Wearing shoes, sandals or slippers which have a low heel and don't support the feet.

• Tightness in the muscles up the back of your legs.

• Weakness in the muscles in your feet or legs.

• Problems with the position of your feet.

• Occasionally it can occur with inflammatory diseases.

What can you do to help painful flat foot?

• Aim for a healthy body weight.

• Avoid wearing hard, flat or unsupportive shoes.

• Ice - only apply an ice pack if wrapped in a damp towel, and use for no more than 10 minutes at a time. Please check your skin regularly as ice can burn.

• Follow the advice from your community pharmacist or other healthcare professional about taking medication. It is important to take medication regularly.

• Have patience, most people's arch pain does get better by following this advice but it can take several weeks or months.

• Follow the exercises and advice in this leaflet.

What tests may be done?

The main way we diagnose painful flat foot is through what you tell us and by examining your foot.

In the majority of cases, you do not need an x ray or any other tests to confirm what is wrong.

Exercises for painful flat foot

1. **Exercise to strengthen the Posterior tibial tendon**

Figure 2: Exercises to strengthen the Posterior tibial tendon

This is an exercise to strengthen the tibialis posterior tendon which runs around the inside of your lower leg and ankle.

Take a towel or resistance band. Make a loop around a table leg. Wrap the band around the middle of your foot and adjust your position until all slack is out of the elastic or towel.

Now, keeping your heel on the floor to act as a pivot, slowly turn your foot inwards, against the resistance of the therapy band, and at the same time turn your foot upwards.

Ensure that you only rotate your foot inwards and not your lower leg. Your knees should remain stationary.

STOP THE STRENGTHENING EXERCISE IF YOU START TO EXPERIENCE PAIN

2. **Calf strengthening exercise**

Stand with your feet shoulder width apart and close to something to hold onto.

Rise up on to the ball of your foot as high as possible and back to the floor.

Figure 3: Double leg heel raises

Progress this to single leg heel raises when able. If required, you can begin this exercise in a seated position until you are strong enough to perform standing.

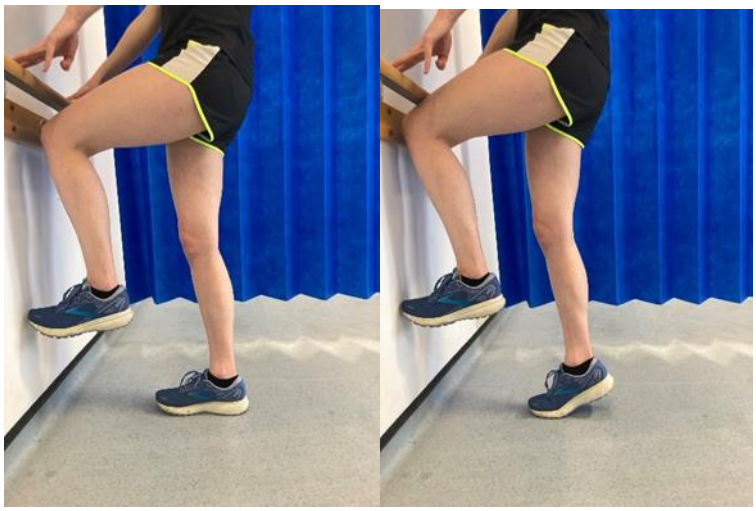

Figure 4:Single leg heel raises

Some discomfort is expected when performing this exercise but the advice is to stop if it is very painful.

What else can be done?

If your pain does not start to improve after a period of 3 months of following the advice above,

please get referred to your local Podiatry Department to see a Podiatrist who can assess your foot and leg function and may recommend further treatment and advice.