ADVICE AND EXERCISES FOR PATIENTS WITH PLANTAR FASCIITIS

Patient Information Leaflet

PHYSIOTHERAPY DEPARTMENT

A SMOKING FREE ENVIRONMENT
INTRODUCTION

This advice and exercise sheet has been produced by Senior Physiotherapists working within Worcestershire Acute Hospital NHS Trust.

It offers simple advice and exercises to help you safely manage your foot problem, often the right advice and exercises are all that is needed.

This leaflet has been made available to your GP who may ask you to try the advice and exercises prior to referring for Physiotherapy. Alternately, you may be given this leaflet whilst you are on a Physiotherapy waiting list.

This leaflet is also available as a download from the Trust’s website www.worcsacute.nhs.uk/patient-services-a-to-z/physiotherapy.aspx

Follow the advice and exercises with care. If any of the exercises make your pain worse STOP and seek advice. IF YOU FEEL THAT YOUR CONDITION IS DETERIORATING OR NOT IMPROVING, YOU SHOULD SEEK FURTHER MEDICAL ADVICE.

Plantar Fasciitis occurs because of micro trauma to the plantar fascia due to abnormal loading. The plantar fascia is a thick fibrous band of tissue on the bottom of the foot. It runs from the heel to the base of the toes and acts like a rubber band to create tension and maintain the arch of the foot.

When placed under too much stress the plantar fascia over stretches causing micro-tearing and degeneration of the tissue. This then results in pain within the fascia and surrounding tissues. These micro-tears repair with scar tissue, which is less flexible than the fascia and can cause the problem to persist for many months.
Following the advice in this leaflet should help reduce your symptoms of plantar fasciitis.

**Symptoms**

1. Pain at the base of the heel which can also spread throughout the length of the foot.
2. Pain can be most severe in the mornings on getting out of bed and with initial weight bearing of the foot.

**Causes:**

- Stress, tension and pulling on the plantar fascia
- Inflexible calf muscles and tight Achilles tendons
- Flat feet (feet which rotate too far inwards on impact)
- High arches and rigid feet
- Overtraining
- Persistent walking on concrete floors
- Wearing unsupportive shoes or poor cushioning on soles of shoes

**Treatment Plan**

**Muscle stretches:** Hold all stretches for 30 seconds and repeat them three times, three times a day.

1) Gastrocnemius

Assume the position shown below. With your affected foot behind you lean your body weight forward until you feel a stretch in the back of your calf. Hold for 30 seconds
2) Soleus

Keep the same positions as exercise 1 but bend your affected knee to feel the stretch lower in your calf. Hold this stretch for 30 seconds.

3) Long Toe Flexors

Assume the position shown below, placing the big toe of your affected leg up against the wall so that it stretches upwards. The muscle you are stretching is attached to your big toe. Hold for 30 seconds.

NB It is a good idea to do these exercises on both legs to prevent a problem developing in the other foot.

Pain relief

Apply an ice pack to the plantar fascia over a layer of damp towel for 10 minutes, twice a day. An alternative easy way of using ice is to fill a plastic 500ml drinks bottle with water and then freeze it. Apply the ice by rolling the bottle under the foot with the layer of towel between the ice and the foot to avoid an ice burn.
Massaging the painful areas gently with your fingers may give pain relief. If there is a particularly painful spot, massage this with the pad of your middle finger in a circular motion for 30 seconds.

Other advice and exercises

Place a golf ball under the foot and roll the foot over the ball. Start with the ball at the base of the big toe, and roll the foot backwards and forwards over the ball. Repeat for each toe so that you have massaged the whole of the plantar fascia. Always exert enough pressure so that you feel a little tenderness.

Correct your shoes. Worn, unsupportive shoes may exacerbate the problem. Arch supports may be beneficial and cushioned insoles may give some relief.

Manually stretch out the plantar fascia prior to putting your foot to the floor. Sit and cross your affected leg over the other leg, holding your toes. Pull them back towards your shin until you feel a stretch in the arch of your foot. This stretch should be held for 10 seconds and repeated 10 times, three times a day, especially first thing in the morning and after prolonged sitting.

Alternative Exercises

Swimming, treading water and cycling are great ways to stay active. However you should avoid weight bearing exercise that places strain on the plantar fascia e.g. running and football.

- Ice can be applied after exercise if the pain has been exacerbated
- Incorporate *rest* into your training programme
QUERIES

If you have any queries about any of the advice contained in this booklet

OR

If you are unable to perform the exercises in accordance with this leaflet

OR

If you have persistent pain or worsening or your symptoms

Please contact one of the Physiotherapy Departments below between 8:30am and 4:30pm Monday to Friday on the direct dial numbers below:-

Worcestershire Royal Hospital - 01905 760622 / 760187

Alexandra Hospital, Redditch - 01527 512114

Kidderminster Hospital & Treatment Centre - 01562 513066