

# Pain at the ball of your foot (Plantar Digital Neuroma) self-management guide

## Information for patients



**If any of the advice given in this leaflet makes your symptoms worse or creates a new pain, please stop and seek advice.**

Podiatry telephone number: **0131 536 1627**

### What is a Plantar Digital Neuroma (PDN)?

PDN is a condition characterised by pain from one or more of the small nerves found in the front of the foot, between the bones at the base of the toes. The nerve can be irritated or damaged.

### Causes

Some of the most common causes of PDN pain are as follows:

- Wearing ill-fitting or badly styled footwear, especially narrow shoes, such as: high heels, hard thin soles, or soles that are too soft
- Activities/occupations that involve placing large amounts of pressure and/or strain on the foot and ankle, such as running or jumping
- Tight or weak muscles in the lower leg and/or foot
- Being overweight
- Direct injury
- Foot deformity
- Toe shape changes such as bunions and hammer toes
- Arthritis of the foot and ankle.

### Signs and symptoms

- Sharp shooting/stabbing burning pain in the affected area
- Numbness/tingling in toes
- Some people describe a feeling as though their sock has wrinkled up inside their shoe
- Some people describe having to remove their footwear and massaging the area for relief.

## What can I do to help myself?

It is important to try to work out what leads to your pain. Avoiding the causes or triggers of painful symptoms is one of the most important parts of helping your recovery.

The following options may help to relieve your symptoms:

### Footwear

Shoe styles with fastening semi-rigid soles with thicker soles in the forefoot area are preferable and should accommodate the width and shape of your foot.

Avoid shoes that bring the pain on. These tend to be narrow, thinner soled shoes. The heel height should be between 1cm and 4cm.

### Modify activity levels

If you take part in higher impact sports or activities you may need to consider other ways of keeping active. Lower impact activities (such as cycling or swimming) may be a good option for you.

### Ice packs

Apply an ice pack for 20 minutes 2-3 times daily (ensure the ice is not applied directly to your skin, a cloth may be a useful barrier).

### Aim for a healthy body weight

If you are overweight this will apply more pressure/strain to the affected area and could reduce your chances of successful resolution. If you need support with this please speak with your GP or the Get Moving Service.

### Pain medication

Some pain medication may help to reduce your symptoms and help you to move more comfortably. Discuss this with your Pharmacist or GP.

### Exercises

Please see below and the back page of this leaflet.

## Exercises

### Calf stretches (image 1)

Keep your heel on the ground, toes pointing forward and knee straight. Lean forward until a stretch is felt in the calf.

Hold still for 20-30 seconds, if comfortable. Release slowly.

Repeat regularly throughout the day.



## Calf stretch (image 2)

Position feet as for above.

This time bend both knees and transfer the majority of your weight through the back foot until the stretch is felt.

Hold still for 20-30 seconds, if comfortable. Release slowly.

Repeat regularly throughout the day.



## Intrinsic strengthening



Find intrinsic strengthening exercises on: [www.healthystep.co.uk/advice/exercise-therapy-ball/](http://www.healthystep.co.uk/advice/exercise-therapy-ball/)

## What if my symptoms fail to resolve?

If after 6 weeks of following the above advice your problem has not improved, seek advice from a Podiatrist.

## Useful web links

For further information:

- <https://livewellwithpain.co.uk/wp-content/uploads/10-footsteps-v2.pdf>
- [www.nhsinform.scot/illnesses-and-conditions/muscle-bone-and-joints/self-management-advice/foot-problems](http://www.nhsinform.scot/illnesses-and-conditions/muscle-bone-and-joints/self-management-advice/foot-problems)
- Find intrinsic strengthening exercises on: [www.healthystep.co.uk/advice/exercise-therapy-ball/](http://www.healthystep.co.uk/advice/exercise-therapy-ball/)
- [https://policyonline.nhslothian.scot/Policies/PatientInformation/Mortons\\_neuroma.pdf](https://policyonline.nhslothian.scot/Policies/PatientInformation/Mortons_neuroma.pdf)

