

Information about a Painful Big Toe joint (Hallux Limitus or Rigidus).

The aim of this leaflet is to give you some understanding of the problems you have with your big toe joint 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.

What is Hallux Limitus or Rigidus?



Figure 1: Painful Big Toe Joint

This is a common form of arthritis located at the base of the big toe (this joint is called the metatarsophalangeal, or MTP joint). This joint is important for the foot to function efficiently, as it needs to bend when the foot is in motion.

If this joint begins to stiffen (hallux limitus), walking can become a painful experience. The MTP joint has cartilage that covers the bones. Sometimes the cartilage can be damaged by either wear or tear or injury, which can lead to the formation or overgrowth of bone. This overgrowth can reduce the movement in the toe (hallux limitus), ultimately resulting in complete loss of movement (hallux rigidus).

What are the possible symptoms?

- Pain and stiffness in the big toe joint.
- Pain in the other metatarsophalangeal joints as they will take more load than normal.
- Swelling around the big toe joint.

What tests may be done?

In the majority of cases of Hallux Limitus or Rigidus, you do not need an x ray or any other tests to confirm what is wrong, unless your problem is severe enough that we may consider surgery. The main way to diagnose this is through what you tell us and examining your foot.

What can you do to help?

- Aim for a healthy body weight.
- Take simple painkillers such as Paracetamol and non-steroidal anti-inflammatory medications to help the pain. You can buy these at the Chemist. You can take these for short periods of time if your symptoms flare –up. Please speak to your Pharmacist or Doctor for advice if you are unsure.
- Padding. You can try padding, supports, insoles and toe separators to help make your foot and toe more comfortable and to stop footwear rubbing.

These can be very helpful and although they will not get rid of the arthritis in the joint, they can make you comfortable enough that you do not need to do anything further. They can be bought on the internet and Amazon is a useful website.

- Wear the right footwear. Changing your footwear to wider shoes to accommodate the width and depth of your foot can improve symptoms. You should try to wear wide shoes with a low heel that fit you comfortably. Shoes with laces or an adjustable strap are best as they can be adjusted to the width of your foot.



We would advise that you do not wear high heeled, pointed or tight shoes as this will make your pain worse.

- Try a shoe with a rocker sole: When the big toe has arthritis, sometimes changing to a shoe style with a stiffer sole can help. If you look at a shoe 'side on' and the toe area of the shoe is sitting off the ground this gives the shoe a 'rocker effect'. The 'rocker effect' stops the big toe joint from bending as much when walking, relieving painful movement whilst creating a rocking forward effect to help you walk more comfortably.

You do not need to buy expensive or specialist designed shoes or "tone ups" to have a rocker sole. Many shoes have this "rocker" effect as part of the normal shoe make up. A very simple look at the shoe or boot side on can help you determine if the shoe has this rocker effect. Many purpose walking shoes, boots and trainers have these features already.



Figure 2: Shoes with rocker soles

- Sometimes this rocker effect can be added to your own footwear by an orthotist or shoe mender if necessary.



Figure 3: Rocker sole added to a shoe

- Podiatry service - they can assess if you need insoles or orthotics and supply these, as well as providing suitable exercises and footwear advice.

Intrinsic Foot Muscle Exercises:

The exercises below will help to strengthen the small muscles in your feet.

1. Tennis Ball Exercise

While seated using a soft tennis ball, applying pressure under your foot, roll it in all directions under the sole of your foot working it from the heel towards the toes and then from side to side.

Perform this exercise 10 – 15 times and repeat 2 – 3 times per day.



2. Foot Arch Exercise

Place your foot flat on ground, gently press your big toe into the ground and be careful not to claw it. Keeping your heel in place raise your arch upwards and hold for 2 seconds.

Repeat 15 times



Figure 2: Arch exercise

3. Toe Scrunching exercise



Figure 3: Toe Scrunch Exercise

This is an exercise to strengthen the small muscles of your feet.

Either seated or standing place your foot flat on the ground on top of a towel. Use your toes to scrunch the towel or paper or pick up your socks.

Repeat this exercise as often as you can

4. Toe extensions

This is a demonstration of an exercise to strengthen the small muscles of your feet.

Either seated or standing hold the big toe on the ground and raise all 4 smaller toes off the ground together. Then keeping the smaller toes on the ground raise the big toe up off the ground. Repeat both these exercises as often as you can.



Figure 4: Small toe extension exercise



Figure 5: Big Toe extension exercise

What else can be done?

If your pain does not start improving after a period of 3 months of following the advice above, please get referred to see a Podiatrist who can assess your foot and potentially recommend further treatment.