Hallux Rigidus or Arthritis of the Big Toe
What is Hallux Rigidus?

Hallux rigidus (Latin for stiff big toe) is a condition caused by arthritis at the base of the big toe. It commonly affects active and sporty people as a result of repetitive trauma or "wear and tear". Other conditions such as gout and rheumatoid arthritis (or other inflammatory arthropathies) can also cause or contribute to hallux rigidus.

What are the symptoms of Hallux Rigidus?

Stiffness and pain of the big toe is the most common complaint. It is most noticeable when the toe is bending upwards when walking or running. The arthritis of the joint can cause a painful bump over the joint which can be uncomfortable when it rubs on shoes.

How is Hallux Rigidus diagnosed?

You will have an examination of your foot by a doctor or specialist. X-rays are used for diagnosis and to assess the severity of the arthritis in the joint.

What is the treatment for Hallux rigidus?

There are non-surgical and surgical options to treat a Hallux Rigidus. Below is a summary of the treatment options:

- **Early arthritis**
  - Non-surgical options

- **More severe arthritis**
  - Surgical options
What are the non-surgical options for Hallux Rigidus?

**Medication**
Painkillers and anti-inflammatory medications will help with the pain and inflammation of arthritis. These will therefore help to reduce the discomfort.

**Foot wear**
Wearing good shoes can help minimise discomfort from Hallux rigidus. This includes shoes that are wide at the front and are stiff. You will know if your shoe is sufficiently stiff if when you hold it in your hands, it is difficult to bend in half.

**Insoles**
Insoles are things that you can put in your shoes to either limit the movement of your big toe or provide cushioning around the painful joints in your feet. These will be provided by our Orthotist.

**Manipulation/injections**-
Manipulation and injections are procedures that can be performed to help improve flexibility and reduce inflammation in a painful big toe that has arthritis. The injection and manipulation are performed at the same time.

You will need to come into hospital for the day for this procedure which is usually performed under general anaesthetic. Once you are asleep, the Orthopaedic Surgeon will manipulate your big toe to make it more flexible and will inject the joint with a mixture of steroid and local anaesthetic. After this procedure, you can walk normally straight away (full weight bearing). Occasionally soreness increases for a few days following the procedure before it improves.

This is only effective in people with early or mild arthritis. It may have an effect in reducing pain and improving flexibility in your big toe for months or even years.

What are the surgical options for Hallux rigidus?

There are several types of surgery for the treatment of Hallux Rigidus. These options include:

1. Cheilectomy
2. Joint fusion (arthrodesis)
**What is involved in a Cheilectomy?**
Cheilectomy is an operation to remove extra bone that forms on the top of the big toe joint causing pain and limiting movement.

A small incision is made over the big toe joint. The Orthopaedic Surgeon performing will remove the bone that is rubbing inside the joint itself. The incision is then closed with stitches. You are encouraged to move the toe, to help regain movement, as soon as the wound is healed.

For those patients with less severe arthritis there is an 80% chance of this surgery being successful for up to 5 years. If a Cheilectomy fails to improve your condition, then a fusion may be undertaken at a later date.

**What is involved in a joint fusion (arthrodesis)?**
The joint is fused to stop movement and hence remove pain.

A small incision is made over the big toe joint. The joint is removed and the bone ends held together with screws and sometimes a plate. The joint then heals in the same way as a fracture making the joint stiff and therefore removing the pain of movement.
Most surgical procedures are performed with a combination of local and general anaesthetic. This combination maximises the chances of returning home the same day following surgery.

Are there any risks associated with these procedures?

Possible complications of surgery include:

- Stiffness of the toe joints
- Infection. All invasive procedures carry a small risk of infection
- A joint that continues to be painful. This may occur after cheilectomy or fusion.
- Swelling
- Bleeding and problems with wound healing
- Injury to nerves – Numbness or tingling can occur at the wound or in the foot. This is usually temporary but in some it may be permanent.
- Failure of fusion requiring revision surgery. Research has shown that this occurs in approximately 10% of cases but is significantly greater if you smoke.
- Position (Fusion only) Research has shown that 5-10% of cases do not fuse in the exact position intended. This may be due to the position not being achieved during surgery or movement of the bones following surgery. You will not be able to wear high heels following a fusion.
- Removal of screws. Occasionally prominent screws may need to be removed
- Blood clots- Deep vein thrombosis (DVT) or pulmonary embolism (PE) are rare. If you or your family have a history please let us know.
- Need for further surgery

What do I need to do before the operation?

Both types of surgery are performed as a day case operation, meaning that you will go home the same day as your operation. It is a good idea to get things organised for when you get home. Below is a list of things it might be a good idea to organise:

- Help with household tasks
- Food cupboards stocked up
- Help with shopping
- Help with children, pets and relatives organised for your return home
- Someone to bring you to and from the hospital
What can I expect after the operation?

When you arrive back on the ward from theatre your leg will be in a bandage and a post op shoe. Your leg will be elevated to reduce swelling. Your foot will be numb due to the local anaesthetic block. This will gradually wear off over 24 hours.

You may need crutches to feel steady on your feet. A Physiotherapist will show you how to walk with crutches.

**Cheilectomy** You will be able to take full weight on your foot immediately and will be encouraged to start moving the toe as soon as the wound has healed (approximately 12 days). Taking weight on your foot normally will help regain movement.

**Fusion** You will be heel weight bearing in a post op shoe for 6 weeks after your operation or until the Surgeon is happy that the joint is fusing. You may need crutches to mobilise safely but this will be assessed by a Physiotherapist prior to you leaving hospital.

What happens after discharge from hospital?

You will go home once you are safely able to cope with walking in this manner. Most patients go home the same day as their surgery.

You will be seen at the Dressing Clinic in the Orthopaedic department between 10 days to 2 weeks after your operation. At this appointment, the Nurses will check the incision and remove the dressing and stitches if required.

What about pain?

Whilst you are in hospital you will be monitored and the medical staff give you painkillers as needed. The Nursing staff ensure that you know what medications to take for pain when you get home.

Keeping your leg elevated helps to control the pain and minimise the risk of your incision becoming infected.

*You will need to keep your leg elevated 50 minutes out of every hour for the first 2 weeks.*

This prevents your incision from leaking and becoming infected.
When can I return to work?

Your own circumstances will determine when you feel ready to go back to work. If you have an office-type job and you can elevate your leg then you should be able to return to work sooner. If your job requires a lot of walking or is strenuous then you may need more time off work. You will need to get a sick certificate from the staff at the hospital before you go home, or from your GP.

When can I return to driving?

You must be free of pain and able to perform an emergency stop. This will also depend on which foot was operated on (right or left). If you have had left sided surgery and drive an automatic car you may be able to drive 2-4 weeks following surgery. Your insurance company must be notified regarding the type of operation that you have undergone to ensure that cover is valid.

What should I do if I have a problem?

If you experience severe pain, excessive swelling, inflammation or discharge please report it to your GP. If you cannot contact your GP you should contact A&E.

Further Information and advice You can contact our Patient Advice and Liaison Service (PALS) on free phone 0800 7838058 or pals@dchft.nhs.uk

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