

# HALLUX RIGIDUS or ARTHRITIS of THE BIG TOE

Fred Robinson BSc FRCS FRCS(orth) Consultant Trauma & Orthopaedic Surgeon.

## *A patient's guide*

### **What is Hallux rigidus?**

Hallux rigidus (Latin for a “stiff great 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 repeated trauma. The stiffness of the toe is especially noticeable on the upward bending caused by walking or running. This stiffness causes pain. As well as the pain and stiffness hallux rigidus causes a bump on the top of the big toe.

### **What is a bunion?**

Unlike hallux rigidus a bunion is a lump at the base of the great toe, caused by sideways drifting and angulation of the great toe. The lump of a bunion is found on the inside of the big toe, as opposed to the top in hallux rigidus.

The pain from a bunion is most commonly caused symptoms by pressure from shoes or, on occasions, by crowding or crossing over of the lesser toes.

The Latin for a bunion is hallux **valgus**, as opposed to **rigidus**, which is a term you may hear used. Some people have both hallux valgus and rigidus!

### **The treatment of hallux rigidus?**

#### **1. Without an operation:**

As with the arthritis of any joint avoiding those activities which cause the symptoms is one option. Obviously not everyone is happy to do this. In ladies symptoms may be relieved by avoiding high heels.

Anti-inflammatory medications and gels may also help.

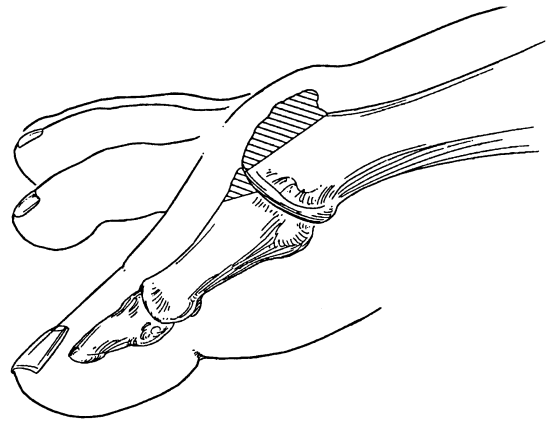
Stiffening the sole of the shoe may also improve symptoms, although the effects are often short-lived.

Your doctor will advise you if lesser forms of surgery such as removal of bony spurs is appropriate.

Surgery should only be undertaken if your symptoms are significant, and appropriate treatment without surgery is not satisfactory to you. There are two forms of surgery: “cheilectomy” and “fusion.”

### **What is a cheilectomy?**

This is an operation to remove the extra bump of bone (shaded in grey in the diagram) on the top of the big toe. It increases joint movement, and is successful in reducing symptoms in 90% of patients with less severe arthritis. If cheilectomy fails, it is possible to perform a fusion at a later date. The principle complications of this operation are that it fails to reduce the pain, and of pain in the scar.



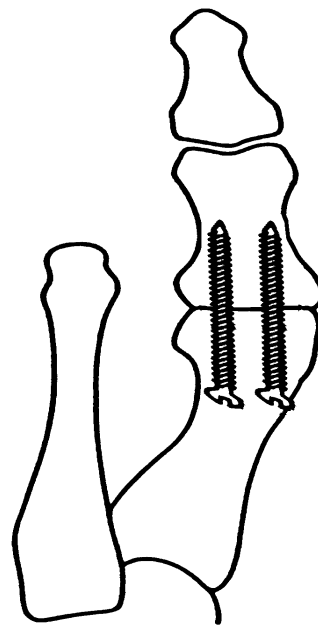
The recovery from cheilectomy is quicker than the recovery from fusion. Over the first two weeks you will be in a stiff soled shoe, to allow the skin to heal. After this you will be advised on exercises to start the joint moving. Performing these exercises early, and regularly will help you to get the best possible result from your surgery.

### **What is a fusion?**

A fusion is an operation when the bone at the base of the toe (the metatarsal bone) is fused to the toe bone (phalanx) producing a stiff joint. Any bony bump is usually trimmed at the same time.

The operation aims to re-align the great toe. It usually maintains strength of the great toe and reduces pain, but movement is lost.

Because the operation involves holding raw bone edges together while they unite, two internal screws are usually inserted. The foot is usually protected in a post-operative shoe. The screws may need removal at a later date if they cause symptoms.



### **What can I expect after the operation?**

Both types of surgery are usually performed either as a day-case (where you do not have to stay in hospital over night at all), or with a stay in hospital over-night.

After the operation, you will wake up with your foot in a bandage. The foot is always painful, but it is usually possible to control the pain with oral medication. In order to minimise swelling, you will need to keep your foot up after the operation.

### **What can I do once I am discharged?**

To start with you will need to rest your foot up (above heart level) most of the time. When the foot is lowered it will throb and swell. This should be avoided. With time, the period you can keep the foot down will increase. After two to three weeks you should be able to keep it down most of the time.

At around two weeks after surgery, you will return to the clinic for removal of stitches. Following this your recovery will depend on the sort of operation you have had.

**Cheilectomy:** After cheilectomy you will start your exercises to mobilise the foot. You will need an open toed sandal, preferably with adjustable straps, to wear after this.

**Fusion:** On average, you should expect to spend 6 weeks in the post-operative shoe. After this you will need an open toed sandal, preferably with adjustable straps. It will be a further 6 – 8 weeks before you can wear a standard shoe for a working day. It is usually 3 to 6 months from the operation before you can hope to resume recreational walking or light sporting activities. Your doctor will advise you on this.

In the longer-term many patients will be able to run and participate in sports after a fusion. This cannot be guaranteed.

If you are slower than these times do not panic, they are only averages, but let your surgeon know when you attend the clinic.

### **Are there any risks or complications?**

Although the operation produces good results in most cases, complications do occur. Despite the great care that is taken with the operation and aftercare, a small number of people (up to 10%) may have a less than perfect results due to problems such as:

- \*1. non-healing of the bone (occurs in about 1 in 20 people), and may require further surgery. Smoking increases the risk of this complication considerably.
- \*2. The position in which the toe is set can also cause problems. Women may find that they cannot wear high heels after a fusion. A few people will find that the position in which the toe is set does not suit them individually, and may consider further surgery to adjust this.
3. sensitisation of the foot due to damage to the small nerves and blood vessels.
4. weight transfer to the second toe (a corn under the second toe)
5. infection
6. the complications of any surgery such as thrombosis (a blood clot) and anaesthetic problems.

(\* these complications only occur after fusion)

Most problems can be treated by medications, therapy and on occasions by further surgery, but even allowing for these, sometimes a poor result ensues. For this reason we do not advise surgery for cosmetic reasons. The level of symptoms before surgery must be worth the risk of these complications. We also advise against prophylactic surgery (surgery to avoid problems that are not yet present).

You can reduce the risk of complications by preparing yourself and your foot, as described in our handout “preparing for foot surgery”

If you are at particular risk of complication, this will be discussed with you. If you have any general or specific worries, you should ask the doctor treating you who will explain it to you.

**How do I know if I have a complication?**

Some problems such as recurrence of the bump, or corn formation becomes obvious with time.

It is important that you notify a doctor if you get an increase in pain after you go home, and particularly if the pain does not settle with elevation and mild painkillers, as this may indicate early infection.

Similarly if you get swelling of the leg or foot which does not settle when the foot is elevated above heart level you should seek medical advice.

**Special Note**

These guidelines are intended to help you understand your operation, and to help you to prepare yourself and your foot for it.

Some patients will want to know more details. Please ask, and we will be happy to add additional notes or comments for your assistance. Above all else please do not proceed with surgery unless you are satisfied you understand all that you want to about the operation.

Finally, this level of detail may cause some patients worry, concern, or uncertainty. Please let your doctor or nurse know if this is the case, so we can address the matters of concern.