

### What is Hallux Valgus (Bunion)?

A bunion is usually a lump on the joint at the bottom of the big toe. The lump is made up of thick skin, soft tissue and bone. The medical name for a bunion is hallux valgus (hallux = big toe, valgus = deformity of the toe). It is caused by the main big toe bone (metatarsal) gradually pointing more inwards and the end of the toe more outwards, as tendons and ligaments tighten on the outside of the toe and loosen on the inside of the toe.

Surgery therefore involves re-positioning the bones as well as loosening and tightening of different ligaments.

## Why do people get bunions?

Most bunions run in families, although shoes do certainly have an effect. It is also more common in people with arthritis, diabetes, flatfeet and nerve problems

## What if I have nothing done?

Hallux valgus is commonly painful due to ill fitting shoe wear. Finding shoe wear with wide toe boxes and soft material is key to improving this pain. As the toe deviates outward it can encroach and overcrowd the lesser toes. This can cause problem with rubbing or cause the lesser toes to change shape permanently (bending at the end knuckles and lifting off the floor; usually a hammer toe). Some hallux deformities remain unchanged if untreated.





\* Typical pre and post-operative xrays of bunion surgery

However the majority worsen with time, leading to more pain, deformity and even arthritis

## What does the surgery entail?

There are a number of surgical techniques described for the treatment of hallux The valgus. majority consist of osteotomy (breaking the bone), correction of the deformity, followed by fixation of the bone in the corrected position with screws. This can occur in either 1 or 2 of the bones depending on the severity of the deformity.

Names are given to these osteotomies by the surgeon, that describes the technique used (i.e. Scarf, Chevron, Akin,). This is usually done with a couple of incisions in the skin but can sometimes be done keyhole.





### What can I expect postoperatively?

This surgery is performed as a day-case procedure, meaning you return home that night. Local anaesthetic will be put around the nerves to your foot meaning that the foot should be numb at the end of the operation. As this wears off there will be some pain later. You will be provided with a special flat shoe that you are required to wear for the first 6 weeks. Whilst wearing the shoe you will be able to walk. However you should keep your foot up as much as possible, especially for the first 2 weeks. The stitches will be removed at 2 weeks and X-Rays will be obtained at 6 weeks in clinic. If everything is ok at this stage, you will be allowed to return to a normal shoe. Because the foot is normally swollen, loose soft shoes may be needed to start off with.

Our usual follow up clinic appointments are at 2 weeks, 6 weeks, 3 months and 6 months. The toe can remain swollen for many months following the operation, and this should be expected.

#### What activities can I do?

Foot and ankle exercises can begin immediately following surgery (see below). General exercise progression is from non-weight bearing and non-impact (cycling and swimming – once wounds have healed) to low impact (stepper, elliptical/cross trainer, walking) to higher impact activity (jogging, exercise classes and sports). We will discuss the timing of this with you. The general rule is to 'listen to your body'. The main reason for being slow to progress is pain and swelling

(during and after activity) that prevents normal movement and muscle control/strength. This will normally pass with time

#### **Exercises:**



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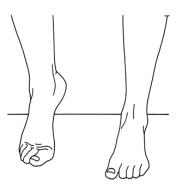
1. To maintain ankle flexibility and circulation regularly pump them up and down as far as possible. Repeat this for 1-2 minutes (each hour if possible)



2. Hold your foot (close to the big toe joint) with one and bend the toe upwards with the other. Hold for 10 seconds and repeat 5-10 times.



3. Next, hold the foot in the same way. This time stretch the toe by bending it downwards. Hold for 10 seconds and repeat 5-10 times.



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4. Whilst sitting down. Raise up onto the toes of your operated foot. Try to bend at the big toe joint, keeping the toes flat to the floor as the foot comes up. Repeat 10-20 times.



#### Work

You can sometimes return to office work after 6 weeks. For those patients who cannot get into work /do more standing / manual may need 2-4 months off work.

### **Driving and Flying**

You can drive as long as the foot is comfortable and you are out of the postoperative shoe. It is imperative that you are safe making an emergency stop, and therefore practicing before embarking on a drive is wise.

Return to driving may be

possible earlier if the car is automatic and the left foot has been operated on. More information available at <a href="www.dvla.gov.uk">www.dvla.gov.uk</a>
According to the Department of Health flying should be avoided for 8 weeks after surgery. For further information see below: <a href="www.nhs.uk/chg/Pages/2615.aspx?CategorylD69">www.nhs.uk/chg/Pages/2615.aspx?CategorylD69</a>

### **Sport**

Sport can be resumed after full recovery from surgery has occurred and walking and running is comfortable. It is sensible to start with light non impact activity and build up to competitive sport. It is important to listen to your body and increase activity as comfort allows. Most patients can go back to running, swimming, cycling by 6 months.

# What are the risks of surgery?

**Infection** – The rate of superficial infection within our department is 1%, the majority of which will respond to oral antibiotics

The risk of deep infection is less than 1 in 200.

Metal work problems – Metal work rarely fails, however some screws can become prominent as the swelling resolves and can require their removal if they are troublesome.

**Stiffness** – This is the most common complication. This has been report in up to 50% of patients at day 35. However, this incidence reduced 1 in 20 at day 120. At 12 months, significant stiffness occurred in just under 1 in 50 feet.

**Thrombosis** – The risk of getting a clot in your leg following hallux valgus surgery is very small. Some patients may be at an increased risk however, and thus your surgeon will tailor the need for clot prevention therapy to yourself based on any noted risks. We advise that you drink plenty of water and move around as much as is sensible to reduce the chances of a clot.

Please be vigilant for symptoms of thrombosis, including:

- Swelling you will have some swelling due to the nature of the surgery but if you have any concerns please call for advice.
- Pain new pains since the operation.
- Calf tenderness.



- Heat and redness compared to the other leg.
- Shortness of breath or chest pain when breathing in.

If any concerns regarding this, please seek medical attention urgently.

**Transfer Metatarsalgia** (pain on the sole under the toes) – This is usually mild but can happen in around 1 in 16 (6%)

Nerve injury – Loss of feeling /altered feeling on top or side of the foot can happen due to the nerves be stretched or damaged during the operation. Sometimes the scars can be sensitive / painful after the operation if nerve fibers grow into them.

Painful scars – Some studies report up to a 5% incidence (1 in 20) of painful scars following hallux valgus correction.

**Fracture** — Fracture has been reported rarely in hallux valgus correction (around 1 in 200)

**Recurrence** – Reported between 8-15% where a first metatarsal osteotomy has been used. The greater the deformity the higher the risk of recurrence. Our rate for the surgery having to be redone is less than 3%

**Avascular necrosis** (loss of blood supply to metatarsal head) – The chance of this is very low (less than 1%0. If it happens then further surgery is normally needed.

Nonunion (bones do not heal) — This is extremely rare, less than 1 in 200 (0.5%)

**Over correction** — This occurs rarely (around 1 in 100) and usually doesn't cause problems, although further surgery may be needed

Complex regional pain syndrome - Some patients develop nerve pain due to the nerves working in a not normal way after the operation. This can happen after any injury /operation. Usually this settles with simple treatment but can occasionally be long-term (probably less than 1 in 100). Some research has shown this can be reduced by taking normal over the counter Vitamin C a few days before the operation.



#### **Further Information**

The figures for complications given in this leaflet have been taken from the most up to date publications on this subject (as of October 2014).

For further reading:

- The British Orthopaedic Foot Surgery Society web site is available at: http://www.bofas.org.uk/PatientInforma tion.aspx (accessed May 2014).
- The foot and ankle hyperbook: www.foothyperbook.com (accessed May 2014).
- Barouk, L.S. Forefoot Reconstruction.
   Springer-Verlag, France. 2005
- Mann, R. Coughlin, M. and Saltzman, C. Surgery of the Foot and Ankle 8th edition, Elsevier, Philadelphia. 2008
- Myerson, M. Foot and Ankle Disorders.
   Saunders, Philadelphia. 2000
- NHS Constitution. Information on your rights and responsibilities. Available at www.nhs.uk/aboutnhs/constitution

# What if I need to contact someone? Fracture Clinic –

Tel: 0151 529 2554 (Monday – Friday)
Please leave a message on the answer
machine stating your name and contact
number and a member of staff will return
your call.

**Ward 17a** – (always open for advice) Tel: 0151 529 3511







# If you require a special edition of this leaflet

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Tel No: 0151 529 2104

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