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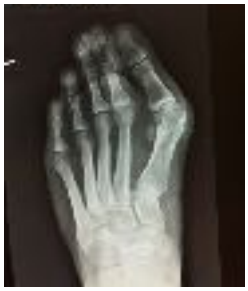
SCARF +/- AKIN
Correction of Hallux Valgus
(Bunion Correction)
Great Toe joint

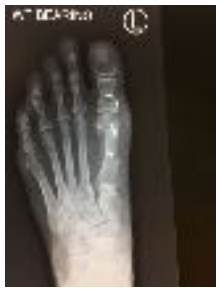
SCARF & AKIN are the names of 2 associated bone resetting (Osteotomy) techniques surgeons use to correct a bunion. There are over 150 described different operations but this has become one the most popular in the UK owing to its consistency for good correction and stability with union rates.

SCARF Osteotomy is a division of the Metatarsal (knuckle bone) of the big toe with subsequent re-alignment and securing with 1 or 2 special screws.

AKIN Osteotomy involves a saw cut in one of the toe bones itself (Proximal phalanx) before removing a wedge of bone and closing the gap and gaining re-alignment. This is usually secured shut with a metal staple or screw. This osteotomy is not always required (Hence '+/-').



Prominent Bunion



After SCARF & AKIN Osteotomy

What to expect

Before the Op.

This is an elective operation that we are choosing to undertake together. It is therefore very important that you and your foot are in as perfect health as possible. Avoid cuts, sores or scratches to the foot and if you have the slightest hint of an infection with fever, temperature or feeling generally unwell then **let us know**. It is not sensible or safe to proceed in any of these circumstances. Your operation should only ever be undertaken when any reversible problems are sorted.

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The operation is usually undertaken as a Daycase procedure.

The toe or occasionally the whole foot will be made numb with local anaesthetic. As well as this you may receive sedation or a general anaesthetic.

After the Op.

To get to the bone an incision is made which is sewn together at the end. Your foot will then be wrapped in a compressive bandage.

A special **'Heel Wedge'** sandal is applied before you go home. This is designed to protect the operation site whilst allowing you to be **full weightbearing**. It often requires the use of a crutch / walking cane for balance and does take a bit of getting used too.

It should be **continually worn, including at night** to prevent the toe getting caught or knocked.
It is to be used for 6 weeks after the surgery before we will be considering its removal in clinic.

Heel Wedge Sandal

You must feel and prove to the nurses you are safe before you should leave the hospital and provide details of an adult partner or friend who will be with you for the initial 24hrs at least.

Your '**2 week wound check'** clinic appointment time and date will be provided before you leave.

Instructions - When I Go Home

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The local anaesthetic will wear off after approximately 6-8hrs but this is variable. The key thing is to take some painkillers as soon as sensation starts to return before the predictable pain kicks in. Paracetamol, distalgesic,or a small anti-inflammatory should suffice.

For the next 2 weeks elevate the foot **'Toes above your Nose'** by reclining with your foot up on cushions etc. Walking with the sandal on is OK but only for essential activities. This elevation will minimise swelling and help the wound heal well.

Leave all dressings alone. If they become loose or dirty then seek nursing or medical help.

Wear the Heel wedge sandal Day and Night. It is to be worn for 6 weeks before a 1-2 week subsequent period of weaning out into normal footwear. This will be guided by your surgeon.

Follow-up Appointments

2 weeks after the surgery a member of the team or occasionally your local nurse will check the skin wound has healed. At this stage the dressing will be changed to a Band Aid style adhesive. If all is well you can then relax on the need to elevate and begin to be increasingly active - **still wearing the sandal**. The sandal can be removed to bathe but be careful not to stand on it.

You will also be advised regarding moving the joint of the toe manually to prevent stiffness

6 weeks after the operation the foot will be xray'd and if this, along with your symptoms are reassuring to us we will advise a period of weaning in to your normal footwear.
Your own shoes or sandals that allow free space around the toe are recommended initially and it may be a further 8 weeks before you are comfortable in a normal 'work' shoe. Recreational walking and sports may take 3-6 months to be considered comfortable.
Physiotherapy is rarely required but is considered at this stage.

When can I return to work?

We recommend a minimum of 2 weeks off work to allow all wounds to heal and the swelling to subside.
Following this, office based activities can be considered if

- Your work place health and safety permit the use of the sandal and crutches.

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- getting to work is possible.
- You should also try to elevate the foot when at rest.
- More manual jobs will require a minimum of 8-10 weeks off work and possibly a bit longer.

When can I drive?

We recommend a minimum of 2 weeks off driving completely to allow all wounds to heal and the swelling to subside.

- Those having had **right** foot surgery or owning a manual car should not drive for 8-10 weeks for risk of damaging the surgery.
- If the **left** foot has been operated on **and** you normally drive an automatic car then driving short distances can be considered at 2-3 weeks provided that you feel safe and in control.

Are there any risks to SCARF +/- AKIN Osteotomy?

All surgery carries risks which must be weighed up against its intended benefit. 1st MTPJ Fusion is a straightforward and relatively minor procedure but the following are recognised complications.

1. **Wound bleeding**. This is rarely profuse and will usually settle with bandaging and elevation. Very occasionally you may have to return to theatre to find the offending vein or artery.

2. **Infection**. A localised wound infection can be treated effectively with tablet antibiotics and is usually of little consequence. A rare bone infection is more serious and may require re-admission to hospital. Any signs of infection will be detected at the '2 week wound check' clinic appointment.

3. **Nerve damage**. The scar itself will be numb initially but will usually settle. Occasionally if the nearby nerve is trapped in the scar tissue or damaged accidentally an area beyond the scar may remain numb or sensitive longer term.

4. **Non-Union.** Despite our best efforts occasionally the bone does not unite and hence join together like it should. Usually this is detectable by xray and the fact the joint is still painful. Extended immobilisation and rest may be all that is required but some need 're-do' surgery. We believe **Smoking** has a significant impact, increasing the likelihood of non-union.

5. **Metalwork Prominence.** The screws occasionally can be felt under the skin once the swelling has subsided. They are designed to stay in forever but if bothersome can be removed after 6 months - 1 year. We

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use xrays during the operation to check the screws are not prominent in the joint

6. **Thrombosis.** The operation itself is low risk for blood clots (DVT) but any other personal risk of this will be reviewed during your admission. You will be given a TED (Compression) Stocking to wear whilst you have reduced mobility.
    a. If you ever experience a cramp sensation with swelling your calf that does not respond to rest and elevation or you feel suddenly short of breath / chest pain – **please seek urgent medical attention.**

7. **Loss of Great Toe.** This is an extremely rare occurrence but is documented here as its effect can be quite disabling.

8. **Mal-alignment.** The aim of the surgery is to re-align the toe such that it fits into everyday footwear comfortably. However, this is of course a judgement call by your surgeon during the procedure. Very occasionally patients are dissatisfied with the position.

9. **Recurrence.** The operation resets your bone straight but it does not undo your innate tendency to get a bunion. Recurrence usually takes many years but occasionally it can happen a lot sooner. Further surgery could be indicated.

10. **Stiffness.** Our surgery causes scar tissue to form and it's a fine balance between allowing the scar to heal but not letting it 'set' and stiffen the joint. You will be taught exercises to undertake from 2 weeks to help prevent this. Occasionally though the Scar tissue wins leaving a stiff toe.

11. **Complex Pain reaction**. For reasons we still don't entirely understand the body sometimes reacts to the surgery in an unpredictable pain reaction. All local causes such as infection will be investigated of course but occasionally a frustratingly debilitating reaction sets in around the toe that needs complex pain control. It can take many months to resolve

12. **Transfer Metatarsalgia.** The foot is reliant on a fine balance of forefoot bone pressures when you stand or walk. Re-aligning your toe aims to improve this back towards a normal. Occasionally however, this balance is upset and a tenderness under a neighbouring toe can be felt with associated hard skin. This can take many months to become apparent.

How do I know if I have a complication?

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It is important that you notify us if you get a persistent increasing 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. Any high temperature or fever should be alerted to a doctor.

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 foot 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).

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.

What are the alternatives?

Hallux Valgus is not a dangerous condition for the vast majority of people. Therefore surgery is a choice you make based on discussions with your surgeon and the working relationship you achieve. There are always alternatives:-

- **No Surgery** – Continued use of splints, shoewear modifications, open sandals etc. are all potential options, however frustrating they seem.
    - The condition will not reverse
    - Over time it is likely ti deteriorate but we can't predict duration
- **Other types** of re-alignment surgery – There are over 100 operations described to correct a bunion. The SCARF/AKIN has proven to work in our hands with predictability that is Safe, Straightforward and Sensible. More common osteotomies used by others include:- Chevron, Basal, Opening wedge & Ludloff.
- **1st MTPJ Fusion** – In this operation the big toe is set straight and the base joint screwed together. It is very effective but stops the big te in effect moving at all. It is reserved for those with arthritis in most situations.

Is there a difference between this & arthritis?

A bunion describes a prominence on the inner aspect at the base of the great toe. This is caused by the sideways drifting and angulation of the great toe.

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A lump on the top of the toe or pain even barefoot can indicate arthritis in the toe. Osteoarthritis is a degenerative condition of the cartilage leading to joint pain and hence differs from hallux valgus.

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

The term for a bunion is hallux **valgus**, as opposed to Osteoarthritis of the big toe called hallux **rigidus**. Some people have both hallux valgus and rigidus!

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 us know if this is the case, so we can address the matters of concern.