

Surgery for Lesser Toe deformity

Patient Information by Mr Stefan Weitzel, Consultant Foot & Ankle Surgeon

General Info

This leaflet provides general information to a patient undergoing **lesser toe deformity surgery** for reference both pre- and postoperatively. This is often performed together with big toe surgery such as for bunions (please also refer to bunion specific information PDF). There may be individual differences of the exact procedure carried out and/or the recommended postoperative rehabilitation protocol, and therefore this may be used only as **a general guide**.

For specific questions or concerns please do not hesitate to get in touch through the practice manager on 020-32914143 or via laura@weitzelorthold.co.uk

What happens before surgery?

Patients who have been booked for **lesser toe deformity surgery** will receive admission information directly by the hospital. They may be contacted by the pre-admission team and may have to attend preoperatively for some basic tests (e.g. bloods, heart tracing (ECG), MRSA swab) to confirm anaesthetic fitness and ensure perioperative safety.

Day of surgery

On the day of the surgery there will be a further opportunity to discuss the exact nature of the surgical procedure recommended with the surgeon as well as details of the postoperative recovery & follow-up arrangement. In addition, benefits and potential complications will be re-explained and documented on a consent form that is signed by both the patient and the surgeon.

Detail of surgical procedure

Lesser toe surgery typically involves an incision over the top of the 2nd, 3rd, 4th and/or 5th toe through which the underlying bone is exposed and the joint removed. Occasionally it is agreed to perform this procedure via small stab incisions (Minimally invasive surgery – MIS).

If the joint is merely excised (*excision arthroplasty*) the dorsal tendon is positioned into the gap, if a *fusion* (stiffening procedure) is intended both bone surfaces are positioned in close contact. The toe is then stabilised with a smooth metal pin (K-wire) that will protrude at the tip and will require removal in clinic at 4-6 weeks. This procedure is mildly uncomfortable but usually well tolerated without the need for an anaesthetic. More recently an internal device can be used that does not usually require removal.

The skin is sutured and dressed. Routinely a toe block (*local anaesthetic injection*) is administered by the surgeon or anaesthetist before the end of surgery to reduce postoperative pain for 12 to 24 hours. If the lesser toe operation takes place as part of a more extensive forefoot procedure an

ankle nerve block is performed for the big toe that also covers the lesser toes. Tingling or other abnormal sensation in the toes may be experienced temporarily and usually fully resolves.

Anaesthetic

Isolated lesser toe surgery is normally carried out under local anaesthetic but a general anaesthetic may be more suitable as discussed with the anaesthetist.

Before discharge

Postoperatively, the patient will be supported with a soft bandage and be asked to elevate the foot at least 2 hours to reduce bleeding risk. Thereafter, a postoperative shoe will be provided to aid mobilisation with or without crutches depending on patient preference.

Further suitable pain relief in the form of tablets is provided before the patient leaves the hospital. For most patients this is a day case procedure, but some may choose to stay overnight for various reasons including slow recovery from the anaesthetic.

Clinic follow-up & return to activities including work

The bandage remains in place until clinic review at 10-14 days. Here the bandage is removed along with sutures if required. A postoperative radiograph to confirm the surgical correction and metalwork position will be recommended at this stage if not already performed during the surgical admission. At this stage further protection is recommended in the postoperative shoe with a compression stocking to control swelling. The patient will be given instructions in pin site care that includes how to dress the toes after a bath or shower. Many patients are able to get into wide-fitting or comfortable footwear (e.g. trainers) at around 4-6 weeks postoperatively depending how much the pins protrude. Most patients are now reasonably active and can get around comfortably around the home or for shorter trips outdoors. Many patients in sedentary jobs (e.g. office work) may now be able to return to work fully or in modified capacity.

The second follow-up appointment is usually scheduled around 4-6 weeks to review progress, ensure the toe healing is completing (including by means of an X-ray) & to remove the pins. Patients in physically more demanding professions may have to delay return to work until after 6 weeks.

Swelling can occasionally persist for 2-3 months postoperatively (and rarely longer) delaying the return to fashionable or tight-fitting shoes.

Complications & Outcome

Early postoperative risks with any forefoot surgery include *bleeding* (which may rarely require an early change of dressing) and *wound healing problems & infection* especially as pin site infection. The latter is rarely serious and responds quickly to regular wound care and a short course of oral antibiotics. Occasionally the pins migrate out and are then best removed by the patient if cumbersome. I would advise against pushing them back in. *Nerve problems* may be noted when the dressing is reduced and are either experienced as a reduced sensation or tingling in the toe or

around the surgical scar. This is usually temporary but uncommonly can be permanent (but even then is rarely troublesome). A more generalised but very rare form of nerve dysfunction is caused by *complex regional pain syndrome (CRPS)* that gives rise to swelling, aching, stiffness & abnormal sensation in the forefoot. This almost always resolves with physiotherapy and mobilisation over a period of months.

Thrombo-embolism (blood clot) in calves and/or lungs is very uncommon in forefoot surgery in patients without significant risk factors (e.g. previous history). Therefore, medical thrombo-prophylaxis is not routinely recommended but a compression stocking is usually offered by the nursing staff.

Longer term risks include significant and persisting *stiffness, swelling and residual or recurrent pain/deformity*. The main longer term problem is failure of the fusion to unite (*non-union about 10% risk and probably higher in smokers*) which normally causes ongoing pain. Ongoing pain can also be a problem in toes that underwent an excision arthroplasty. However, a general outcome review shows that a large majority of patients is at least satisfied or better with the result of surgery (>80%).