Surgery for Hallux rigidus (degenerative arthrosis of the big toe)

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General Info

This leaflet provides general information to a patient undergoing **big toe surgery for hallux rigidus** for reference both pre- and postoperatively. 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@weitzelortholtd.co.uk

What happens before surgery?

Patients who have been booked for hallux rigidus 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

Cheilectomy typically involves an incision over the top of the main big toe joint through which the underlying bone is exposed and the bump removed. Occasionally it is agreed to perform this procedure via one or two small stab incisions (Minimally invasive surgery – MIS).

If a big toe joint fusion *(metatarso-phalangeal arthrodesis)* is performed any remaining cartilage is removed from the exposed joint and the bones fixed with screws and sometimes a plate. These may require later removal.

The skin is sutured and dressed. Routinely an ankle nerve 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. Tingling or other abnormal sensation in the toes may be experienced temporarily and usually fully resolves.

Anaesthetic

Surgery is normally carried out under general, spinal or regional anaesthetic and the patient will discuss with the anaesthetist the most suitable technique.

Before discharge

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

In case of a joint fusion these are obligatory to help offload the forefoot and usually a postop shoe with an elevated heel (wedge-shoe) is used.

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 tom stay overnight for various reasons including slow recovery from the anaesthetic.

Clinic follow-up & return to activities including work

3-4 days after a ***cheilectomy*** the patient is asked to reduce the dressing and start toe exercises. Follow-up usually takes place in clinic around 10-14 days, for wound check and removal of sutures if required. Further toe exercises are then recommended, and the patient can wear comfortable footwear as soon as possible before the 6 week follow-up appointment. Most patient return to work after 1-3 weeks.

In case of a **joint fusion (*arthrodesis)*** the bandage remains in place until clinic review at 10-14 days. The bandage is then 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. Most patients are now reasonable active with crutches 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.

Many patients can get into wide-fitting or comfortable footwear (e.g. trainers) at around 4-6 weeks postoperatively. The second follow-up appointment is usually scheduled around 6 weeks to review progress and ensure the bone healing is completing (by means of a further X-ray). 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*. The latter is rarely serious and responds quickly to regular wound care and a short course of oral antibiotics. *Nerve problems* may be noted when the dressing is reduced and are either experienced as a reduced sensation or tingling in the big toe or around the surgical scar. This is usually temporary but uncommonly can be permanent (but even so 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-prohylaxis is not routinely recommended but a compression stocking is usually offered by the nursing staff.

Longer term risks include significant and persisting *stiffness, residual or recurrent pain.* 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. However, a general outcome review shows that a large majority of patients is at least satisfied or better with the result of surgery (>90%).