

# Knee Replacement Surgery

Patient Information by Mr Stefan Weitzel, Consultant Orthopaedic Surgeon

## General Info

This leaflet provides general information to a patient undergoing **knee replacement surgery** 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@weitzelorthold.co.uk](mailto:laura@weitzelorthold.co.uk)

## What happens before surgery?

Patients who have been booked for **knee replacement 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. Any concerns about anaesthetic fitness are discussed with my consultant anaesthetist who may wish to see and assess the patient preoperatively. To minimise any risk occasionally co-existing medical problems have to be optimised preoperatively and the patient may be referred back to the GP for this purpose.

At this stage there is also an assessment to ensure adequate support is available for the patient at home after discharge from the hospital.

## 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

*Total knee replacement* is major surgery that aims to replace the knee joint by removing the worn cartilage surfaces of the lower end of the femur, the top of the shin bone (tibia) and the back side of the knee cap (patella). Some patients may be offered a *partial joint replacement* (medial or patello-femoral) as discussed preoperatively. Surgery is done through a straight incision at the front of the knee and the removed surfaces are then replaced with metal (femur & tibia) and plastic (patella) implants that are "cemented" in place. A hard-plastic liner (polyethylene) is then positioned to create a metal-plastic bearing surface that allows movements with minimal wear. The wound is sutured and closed with metal clips and a bandage applied.

As a matter of routine, a local anaesthetic injection is carried out during surgery which reduces any postoperative pain for around 8-10 hours. The operation takes approximately 1-1.5h and can be done under spinal or general anaesthetic.

### **Postoperative Recovery**

Postoperatively, the patient is admitted to the ward and given regular painkillers and daily blood-thinning injections (Clexane – a type of heparin) for thrombo-prophylaxis (prevention of blood clots). These are continued after discharge to complete a 2 week- course after surgery.

Blood tests and X-rays take place postoperatively, but the important aim is to start walking and moving/strengthening the knee as soon as possible as a speedy recovery improves the outcome and lowers the complication rate. This rehabilitation process is led by a team of physiotherapists and nursing staff, and on average most patients can be discharged after 3-5 days.

Wound care continues in the community and surgical clips are usually removed around 10-14 days postoperatively, either by the GP practice nurse or other trained practitioner. This is normally arranged by the ward staff.

Physiotherapy and self-exercises carry on after the patient has left the ward and the exact protocol will be communicated to the patient by the physiotherapist. This includes written instructions and advice regards the use of walking aids and precautions to avoid falls and strategies to facilitate the return to all activities of daily living over time.

Mr Weitzel will review the patient at around 4-6weeks postoperatively in clinic.

### **Complications & Outcome**

Early postoperative risks with knee replacement surgery include *bleeding* (which may rarely require a blood transfusion) and *wound healing problems & infection*. Fortunately, the latter is uncommon & if it occurs mostly superficial and responds to active wound care & antibiotics. The deep infection rate is significantly <1%.

*Nerve injury* can affect the superficial skin nerves around the front of the knee causing some numbness that often remains in the long term but is rarely a problem. 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. This usually resolves with physiotherapy. The risk of *thrombo-embolism (blood clots)* in legs and lungs is increased after knee surgery and stockings/foot pumps are used to lower the risk together with injections or tablets taken for 2 weeks after surgery.

*Stiffness & residual pain* (up to 10%) are further problems, and in the long-term the artificial joint can wear out or loosen and revision surgery may be required. However, more than 19 out of 20 artificial knee joints (>95%) last at least 10 years (and many much longer), making knee replacement together with hip replacement and cataract surgery the most successful surgical interventions in terms of their potential to improve quality of life.

Partial joint replacement may give a more natural feel of the knee postoperatively and allows more movement and often a quicker recovery, but there is the disadvantage of a *higher re-operation* rate.