

# Total knee replacement

## Knee osteoarthritis overview

Osteoarthritis is a disease which affects the joints in the body. The surface of the joint is damaged and the surrounding bone grows thicker. 'Osteo' means bone and 'arthritis' means joint inflammation. When joints are swollen and damaged they can be painful and can also be difficult to move.

The knee is the largest joint in the body and also one of the most complicated because it has many important jobs to do. It must be strong enough to take our weight and must lock into position so we can stand upright. It also has to act as a hinge so we can walk. It must withstand extreme stresses, twists and turns, such as when we run or play sports. The end of each bone is covered with cartilage which has a very smooth, slippery surface and allows the ends of the bones to move against each other almost without friction. It is this cartilage that gets worn with osteoarthritis.

## Total knee replacement overview

Knee replacement surgery (arthroplasty) involves replacing the worn out knee with an artificial joint (see diagram opposite). It is a routine operation for knee pain most commonly caused by arthritis. More than 70,000 knee replacements are carried out in England and Wales each year. Most people who have a total knee replacement are over 65.

For most people, a replacement knee will last for at least 15 to 20 years, especially if the new knee is cared for properly and not put under too much strain. Other surgery such as a partial knee replacement and arthroscopic debridement are used as alternatives to total knee replacements in specific situations. You can discuss with your surgeon which is the most appropriate procedure for yourself.

## What are the benefits of a total knee replacement?

There are several benefits of knee replacement surgery. These include:

- relieving pain
- improving the function of your knee
- improving your ability to move around
- improving your quality of life

About 4 out of 5 people who have a total knee replacement say they are happy with their new knees, although some people are disappointed with the outcome of their surgery or are unsure whether there has been an improvement. It is important to remember the main aim of knee replacement surgery is to improve pain and not necessarily function, therefore, your knee may still be restricted after the surgery.

Before



After



## What are the risks of a total knee replacement?

Complications occur in about one in 20 cases, but most are minor and can be successfully treated. Possible complications include:

- Infection of the wound – this will usually be treated with antibiotics, but occasionally the wound can become deeply infected and require further surgery. In rare cases it may require replacement of the artificial knee joint
- Unexpected bleeding into the knee joint
- Ligament, artery or nerve damage in the area around the knee joint
- Blood clots or deep vein thrombosis (DVT) – clots may form in the leg veins as a result of reduced movement in the leg during the first few weeks after surgery. They can be prevented by using special support stockings, starting to walk or exercise soon after surgery and by using blood thinning medicines
- Fracture in the bone around the artificial joint during or after surgery
- Excess bone forming around the artificial knee joint and restricting movement of the knee
- Excess scar tissue forming and restricting movement of the knee
- The kneecap becoming dislocated – surgery can usually repair this
- Numbness in the area around the wound scar
- Allergic reaction

All major surgery carries a small risk and 1 in 100 patients may have problems such that they are worse after surgery. In some cases, the new knee joint may not be completely stable and further surgery may be needed to correct it.

## What to do before the operation

Stay as active as you can. Strengthening the muscles around your knee will aid your recovery.

You can continue to take regular exercise such as walking, swimming or using an exercise bike prior to your operation if your pain allows.

See the exercises on following page.

## What to expect after the operation

On average people will spend between 2–5 days in hospital following the surgery. The length of stay will depend on your speed of recovery and any complications following the surgery.

You will be expected to follow some specific exercises following the surgery to strengthen the muscles around the joint. Depending on your situation you may require an assessment by an occupational therapist to assess your function and you will need to attend regular physiotherapy sessions.

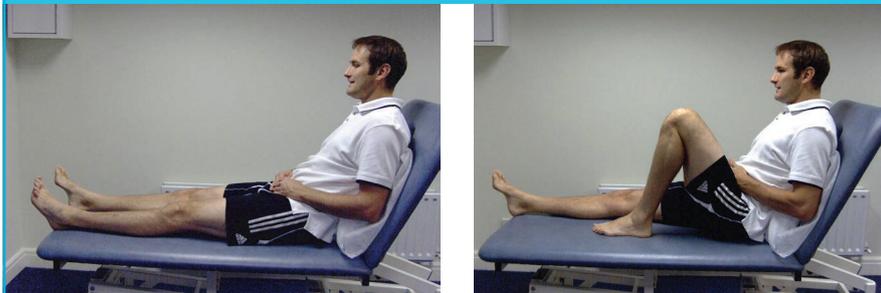
Other expectations include:

- Most patients can bend the knee to a right angle after the operation
- Driving will not be possible for 6 weeks following surgery
- It may be possible to have a bath once your wound is fully healed
- An artificial knee will NOT allow heavy work, lifting or repetitive impacts
- Holiday flights after surgery should be avoided for a maximum of three months for short haul and six months for long haul flights
- You may require regular follow-ups with x-rays after the operation

## Exercises

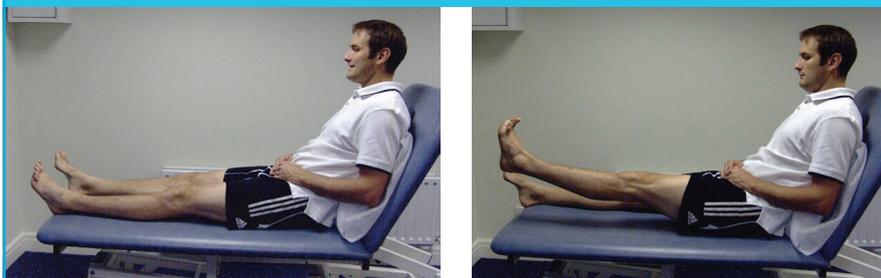
The following knee exercises may help improve you pain prior to your operation and maintain or improve the strength around your knee so that your recovery may be quicker after the operation. Do not perform these if they give you significant pain that does not settle for more than 30 minutes after the exercises and these are not to be done after your operation until you have seen your consultant or a physiotherapist.

### A Heel slides



- Sitting on your bed, slide your right or left heel up towards your bottom (using a towel to help pull it).
- Hold for 30 seconds, then straighten leg pushing knee down into the bed applying extra weight with your hands. Hold for 30 seconds.

### B Strengthening exercise - straight leg raise



- Sitting on your bed, keep your right or left leg as straight as possible then lift your leg up approximately 15cm.
- Repeat this exercise until your muscles feel tired. Stop if your pain significantly increases.

### C Through range quads



- Sit on a chair with a weight tied around your right or left ankle then straighten your knee.
- Repeat this exercise until your muscles feel tired. Stop if your pain significantly increases.

You may find it beneficial to use an exercise bike for 10–30 minutes a day to improve the range of movement and pain in your knee.

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If you would like to talk to someone outside the service contact the **Patient Experience Team** on **0113 220 8585**, Monday to Friday 9.30am to 4.30pm or email [lch.pet@nhs.net](mailto:lch.pet@nhs.net)

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