

## **Knee replacement**

Knee replacement involves replacing a knee joint that has been damaged or worn away, usually by arthritis or injury.

### **About knee replacement**

Your knee joint is made up by the ends of your thigh bone (femur) and shin bone. These normally glide over each other smoothly because they are covered by shock-absorbing cartilage. If the cartilage is damaged by injury or worn away by arthritis it can make the joint painful and stiff.

A new knee joint can help improve your mobility and reduce pain.

Depending on the condition of your knee joint, you may have part or your entire knee joint replaced. A total knee replacement of the entire joint is more common.

### **Types of artificial knee**

Artificial knee parts can be made of metal and/or plastic.

Some artificial knee parts need a substance called 'bone cement' to keep them in place. Others are coated with a chemical which encourages bone to grow into it to hold the parts in place.

A knee replacement usually lasts for at least 10 to 15 years.

### **What are the alternatives?**

Surgery is usually recommended only if non-surgical treatments, such as physiotherapy and exercise, taking medicines or using physical aids like a walking stick, no longer help to reduce pain or improve mobility.

Your surgeon will explain your options to you.

### **Preparing for your operation**

Your surgeon will explain how to prepare for your operation. For example if you smoke you will be asked to stop, as smoking increases your risk of getting a wound infection and slows your recovery.

The operation usually requires a hospital stay of about five days and it's done under general anaesthesia. This means you will be asleep during the operation. Alternatively you may prefer to have the surgery under spinal or epidural anaesthesia. This completely blocks feeling from your waist down and you will stay awake during the operation.

Your anaesthetist will advise which type of anaesthesia is most suitable for you.

If you are having a general anaesthetic, you will be asked to follow fasting instructions. Typically you must not eat or drink for about six hours before a general anaesthetic. However, some anaesthetists allow occasional sips of water until two hours beforehand.

At the hospital your nurse will may do some tests such as checking your heart rate and blood pressure, and testing your urine.

Your surgeon will usually ask you to sign a consent form. This confirms that you understand the risks, benefits and possible alternatives to the procedure and have given your permission for it to go ahead.

You will also be asked to consent to placing your name on the National Joint Register, which is used to follow up the safety, durability and effectiveness of joint replacements.

You will need to have an injection of an anti-clotting medicine called heparin and this will be continued for 28 days following your operation.

### **About the operation**

A knee replacement usually takes up to two hours.

Your surgeon will make a single cut (10 to 30cm long) down the front of your knee.

Your kneecap is moved to one side to reach the knee joint. The worn or damaged surfaces are removed from both the end of your thigh bone and the top of your shin bone. The surfaces are shaped to fit the artificial knee joint. The new joint is fitted over both bones.

Sometimes the back of your kneecap is replaced with a plastic part. This is called patellar resurfacing.

After the new joint is fitted, the skin cut is closed with stitches or clips and covered with a dressing. Your knee will be tightly bandaged to help minimise swelling.

### **What to expect afterwards**

You will need to rest until the effects of the anaesthetic have passed. You may not be able to feel or move your legs for several hours after an epidural anaesthetic.

You may need pain relief to help with any discomfort as the anaesthetic wears off.

Starting from the day after your operation, a physiotherapist (a specialist in movement and mobility) will usually guide you daily through exercises to help your recovery.

You will be in hospital until you are able to walk safely with the aid of sticks or crutches. When you are ready to go home, you will need to arrange for someone to drive you home. You should try to have a friend or relative stay with you for the first week.

Your nurse will give you some advice about caring for your knee and a date for a follow-up appointment before you go home.

Dissolvable stitches will disappear on their own in seven to 10 days. Non-dissolvable stitches and clips are removed 10 to 14 days after surgery.

### **Recovering from knee replacement surgery**

If you need them, you can take over-the-counter painkillers such as paracetamol or ibuprofen. Follow the instructions in the patient information leaflet that comes with the medicine and ask your pharmacist for advice.

The exercises recommended by your physiotherapist are a crucial part of your recovery, so it's essential that you continue to do them.

You will be able to move around your home and manage stairs. You will find some routine daily activities, such as shopping, difficult for a few weeks. You may need to use a walking stick or crutches for up to six weeks.

When you are resting, you should do so with your leg raised and your knee supported to help prevent swelling in your leg and ankle.

Depending on the type of work you do, you can usually return to work after six to eight weeks.

Follow your surgeon's advice about driving. You shouldn't drive until you are confident that you could perform an emergency stop without discomfort. This will be typically at least 6 weeks.

### **What are the risks?**

Knee replacement surgery is commonly performed and generally safe. However, in order to make an informed decision and give your consent, you need to be aware of the possible side-effects and the risk of complications of this procedure.

### **Side-effects**

These are the unwanted, but mostly temporary effects of a successful treatment, for example feeling sick as a result of the general anaesthetic.

Your knee will feel sore and may be swollen for up to twelve months. The knee may feel warmer than the other side for a similar length of time.

You will have a scar over the front of the knee. You may not have any feeling in the skin around your scar. This can be permanent.

### **Complications**

This is when problems occur during or after the operation. Most people are not affected. The possible complications of any operation include an unexpected reaction

to the anaesthetic, excessive bleeding or developing a blood clot, usually in a vein in the leg (DVT).

Specific complications of knee replacement are uncommon, but can include those listed below.

- Infection of the wound or joint. Antibiotics are given during and after surgery to help prevent this.
- Unstable joint. The knee joint may become loose and you may require further surgery to correct this.
- Damage to nerves or blood vessels. This is usually mild and temporary.
- Scar tissue. This can build up and restrict your movement. Further surgery may be needed to correct this.

The artificial knee joint usually lasts for 10 to 15 years, after which you may need to have it replaced.

The exact risks are specific to you and will differ for every person. Ask your surgeon to explain how these risks apply to you.