East and North Hertfordshire NHS Trust

Unicompartmental Knee Replacement (UKR) Surgery – Patient Information



A unicompartmental knee replacement

What is arthritis?

Arthritis is a group of conditions that cause damage to one or more joints. Your surgeon has recommended a partial knee replacement operation to address the arthritis in one compartment of your knee. However, it is your decision to go ahead with the operation or not. Here you can find information about the benefits and risks of the surgery to make an informed choice. You can ask your surgeon or health care professional any additional questions you may have.

The most common type of arthritis is osteoarthritis, where there is gradual wear and tear of a joint. For a few people this is as a result of a previous problem or injury but usually it happens without a known cause.

Eventually, arthritis will wear away the normal cartilage covering the surface of the joint and the bone underneath becomes damaged. This causes pain and stiffness in the knee which can affect your ability to perform normal day-to-day activities. If only part of your knee is damaged by arthritis, it is sometimes possible to have a partial knee replacement (UKR) instead of a total knee replacement (TKR).

What are the benefits?

- Reduced pain
- Possibility of increased range of movement (compared to TKR)
- Feels more like a ‘normal’ knee (compared to TKR)
- Allow return to day-to-day activities

Are there any alternatives to UKR?

Simple painkillers such as paracetamol and anti-inflammatory painkillers such as ibuprofen can help control the pain. You should check with your GP that they do not conflict with any other medication you may take.

Walking aids, such as a walking stick, held on the opposite side to the affected knee can make walking easier.

Regular exercise can help to reduce stiffness in your knee. Physiotherapy may help to strengthen your muscles and reduce pain.

Having a 'normal' BMI and maintaining this weight will reduce the load on your knee. If you have a higher BMI, losing weight can have a significant impact on your pain.

A steroid injection into your knee joint can sometimes reduce pain and stiffness for several months. However, the effectiveness of steroid injections can reduce each time you have one.

Another surgical option is an 'osteotomy' which involves realigning your leg to take the load off the worn part of your knee. If you are a candidate for this operation, you consultant can offer you more information.

As arthritis becomes more severe, these other measures become less effective and your surgeon may recommend a knee replacement.

Surgery

Prior to the surgery, the healthcare team will carry out a number of medical checks. There are various anesthetic techniques possible, and the anesthetist can discuss the best option with you. The operation usually takes around 90 minutes.

The surgeon will make an incision on the front of your knee and check that the knee is suitable for a partial replacement (as seen on x-rays / MRI taken before the operation). If there is any damage seen that wasn't highlighted on the investigations before, you may need to have a total knee replacement instead.

The surgeon will then remove the damaged joint surfaces. They will then insert a partial artificial knee joint made of metal, plastic or ceramic, or a combination of these materials. The implant is fixed to the bone using acrylic cement or special coatings on your knee replacement that bond directly to the bone. The skin will then be closed with stitches or clips.

Before the operation

- Make sure the healthcare team knows about all the medication you take and follow their advice (this includes all blood-thinning medication as well as herbal and complementary remedies, dietary supplements, and medication you can buy over the counter).
- Do not shave or wax the area where a cut is likely to be made the week before the operation.
- Try to have a bath or shower the day before or on the day of the operation.
- Keep warm around the time of the operation.
- If you are diabetic, keep your blood sugar levels under control around the time of your procedure.

Possible complications

- Bleeding
- Infection
- Allergic reaction

- Acute kidney injury
- Difficulty passing urine
- Blood clot (DVT or pulmonary embolus)
- Chest infection
- Damage to nerves around your knee leading to weakness, numbness or pain in leg and foot
- Damage to blood vessels
- Bearing dislocation – Piece of plastic in the middle of the knee replacement comes out of place.
- Wear or loosening without infection
- Continued pain
- Continued stiffness

Post op recovery

To go home it is essential your pain is controlled, you are safe mobilizing, you're medically stable and you have any care arranged that you may need. People normally stay in hospital for 1-2 days after the operation.

- ***Weight bearing*** – You will be able to fully weight bear.
- ***Exercises*** - You will be given exercises to start on day 1, and you must do these until you see your physiotherapist and your exercises are progressed.
- ***Pain relief*** - You should also use analgesia to address the pain. Often, over the counter medication such as paracetamol and ibuprofen will reduce your symptoms. You will also be discharged with the appropriate medication/advice on medication. You can speak to your GP or pharmacist for further support with pain killers.
- ***Wound/dressing*** – You will have a dressing on the wound. You will have a wound check and removal of stitches / clips as needed at 2 weeks. It is important to keep the wound dry until it has healed.
- ***Swelling management*** – It is important to reduce swelling.
    - ***Rest*** – You can remove your brace unless advised differently.
    - ***Ice*** – use ice packs regularly to reduce pain and swelling. Protect your skin by wrapping the ice pack in a pillow case or towel. Apply to the knee for 15-20 minutes per hour.
    - ***Elevation*** – Elevate the leg above hip level when sitting or heart level when lying, and ensure the leg is supported.

There are factors that can affect the healing process:

- *Smoking*: This can directly delay healing. You should seek advice to stop smoking. It may reduce your risk of developing complications and will improve your long-term health.
- *Alcohol*: Avoid alcohol in the early stages as it can slow down healing and increase chance of re-injury.
- *Nutrition*: A balanced diet including vitamin D can reduce joint pain and enhance healing.

Physiotherapy after surgery

The aim of physiotherapy is to restore normal function in your knee. It is usual for the quadriceps muscle to weaken very quickly. You need to improve movement, strength, balance and coordination within the first 6 months after your operation to achieve the best results. Exercises are important to achieve this and prevent complications such as scar tissue formation, stiffness and muscle weakness.

Exercises will be taught to you after the operation. They may initially be uncomfortable but should not cause excessive pain or swelling. Pain relief is important to allow you to do the exercises 4 times per day.

It is important you can fully straighten your knee as soon as possible after surgery. Do not rest or sleep with pillows or towels supporting the knee in a bent position as this could delay your recovery.

The goal for the first few weeks is to reduce pain and swelling. This will allow you to gain the most benefit from your exercises. You should rest, use ice and do your exercises regularly. To reduce the risk of blood clots you should walk at home with your walking aid at frequent intervals. You should stay home as much as possible in the first few weeks after surgery to avoid overdoing activities and prevent injury.

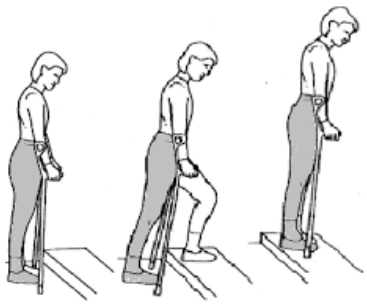
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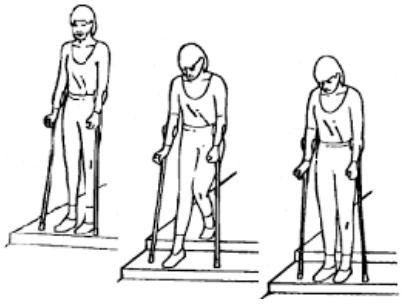
You will be taught how to safely use a walking aid (stick, crutches , frame etc), if you haven't done so before.

Stairs technique with crutches:

To go upstairs – use your good leg first, followed by your operated leg, then the crutch/stick.
To go downstairs – lower the crutch/stick first, then the operated leg, followed by the good leg.

Take one step at a time and use a hand rail too if available.





Long term rehabilitation

It is vital that you follow the instructions from your physiotherapist. The exercises have been chosen specifically for your surgery. The physiotherapist will assess to determine if you are ready to progress to the next stages. Commitment to your rehabilitation is essential.

Most people make a good recovery, have less pain, and can move around much better after a partial knee replacement. A UKR never quite feels the same as a 'normal' knee. You should aim to bend the knee to around 120°. A partial knee replacement can wear out with time. This will depend on your weight and how active you are. Eventually a worn knee replacement will need replacing. The vast majority of UKR last >10 years.

<u>Driving</u>

You will not be able to drive for approximately least 6 weeks. You will need to be walking without crutches and be able to put full weight on your operated leg. You must be able to perform an emergency stop. You should inform your insurance company and the DVLA that you have had surgery.

Contact details

The hospital physiotherapy team can be contacted on 01438 388111 / 01438 285680 if email orthotherapy.enh-tr1@nhs.net.

You will be referred to your local physiotherapy department for ongoing rehabilitation. Please contact them directly regarding your follow up appointment. Please see contact details below.

NHS Physiotherapy clinic:

Please call 0300 123 7571 if you are attending any of the following clinics:

- Kingsway Health Centre, Stevenage Leisure Park
- Royston Physiotherapy Department, Royston Hospital
- QE2 Hospital Physiotherapy Department, WGC
- Nevells Road Health Centre, Letchworth
- Hertford County Hospital Physiotherapy Department
- Waltham Cross Health Centre
- Cheshunt Community Hospital

- St Albans City Hospital Maple Therapy Department 0300 020 0656

- Gilbert Hitchcock House, Bedford (all Bedford clinics) 01234 792088

Disclaimer

Please note that this information is true for most patients. Sometimes you may have different instructions which would be communicated to you by your surgeon or physiotherapists.

Information developed by Knee Unit at Lister Hospital Orthopaedic Department with Hannah Harwood (Knee ESP), Mr Chatoo & Mr Thakrar 2023.