



Spire

Claremont Hospital



sheffield **orthopaedics** Ltd

Partial knee replacement

Important medical advice



Sheffield Orthopaedics Ltd

Welcome

We want you and your family/carer to understand as much as possible about the operation. By learning what to expect, you and your family will be better prepared for your hospital stay and recovery. This booklet should help you.

However, if after reading this booklet, you have any questions, please speak to a member of staff who will be pleased to help you. Please do ask any questions at your next clinic appointment.

What is my diagnosis?

The ends of bones within the knee joint are covered with a thick, shiny gristle, known as articular cartilage. With advancing age, wear and tear and in some people who are genetically predisposed, this gristle becomes worn. In some patients this wear may be minor but in some patients it may wear through to bare bone. This is what happens with the development

of osteoarthritis. Usually as osteoarthritis develops or worsens it will cause symptoms of pain that is made worse with exercise as well as other potential symptoms such as swelling, stiffness and reduced exercise tolerance.

This condition can involve lots of joints but in the knee it may affect one, two or three of the major areas (compartments). These areas are under the kneecap (patellofemoral arthritis), between the major bone ends on the inside of the knee (medial arthritis) and between the same major bone ends on the outside of the knee (lateral arthritis). When all three are affected, things are pretty bad!



What are my treatment options?

Prior to considering surgery, patients are advised to explore all non-surgical ways of controlling their pain. These include taking painkilling tablets, anti-inflammatory medication, lifestyle changes (including weight reduction and modifying activity), physiotherapy (to try and offload the joint and keep the muscles in good shape), advice and help from other specialists, such as chiropractors. Injections into the knees can help, although rarely with any long term benefit. Keyhole surgery (arthroscopy) can't cure arthritis but occasionally it may ease symptoms and buy some more time by smoothing rough edges or removing loose pieces. Sometimes surgery to break and reset the bone may be considered appropriate in a patient's who are relatively young and have very bent legs (bow or knock-knees). This works by straightening the leg and moving pressure off the arthritic area of the knee but it will only work if the arthritis is just in one part of the knee.

The ultimate surgical treatment for a worn joint is to replace it but knee joint replacement surgery should not to be considered lightly, as potential problems and complications can ensue. Although rare these complications can and make patients worse than they were before the surgical procedure. If surgery is planned to replace the worn joint surface, then your surgeon may discuss partial knee replacement or total knee replacement.

In patients with arthritis change that is limited to one area of the joint partial knee replacement may be a good option, but, if the arthritis is severe and affects more than one compartment particularly in older patients, total knee replacement is advised. In very special cases, it may be used in younger patients. In recent years new technology has made this procedure much better and the results are now comparable to hip replacement surgery. If your arthritis is very well localised to one compartment of the knee, your surgeon may discuss partial knee replacement with you.



In August 2019 Sheffield Orthopaedics Ltd (SOL) was awarded an overall rating of 'Good' by the Care Quality Commission (CQC). The CQC is the independent regulator of health & adult social care services in England. It's purpose is to make sure health & social care services provide people with safe, effective, compassionate, high-quality care, & it encourages care services to improve.



Partial Knee Replacement

Partial knee replacement can be controversial. There is increasing evidence from medical research to show that after partial knee replacement, patients (if appropriate) do better in terms of more movement in the knee and a higher level of activity, compared to a total knee.

Whilst this may sound attractive to some, the risk of a partial knee replacement is that with time it may need converting to a total knee replacement, often because the rest of the knee may wear out with advancing age. In fact, studies show that there can be up to a three times higher risk of further surgery after a partial knee

replacement than after a total knee replacement. The reasons behind this are complicated, for example some medical studies show that younger more active people tend to have partial knee replacements and we know that this group of patient's are more likely to wear out a knee replacement compared with older less active patients. The risk of needing further surgery after a partial knee replacement should be balanced against the potential benefits of more movement and better function compared to a total knee replacement. This should be discussed carefully between the patient and surgeon prior to surgery.

What are the aims and success rates of knee replacement surgery?

Both partial and total knee replacement are performed to try and relieve pain. This is achieved in 80-90% of patients. With either operation, there are a small proportion of patients who continue to have pain and often there is no explanation for this. After a partial knee replacement, this may be improved with conversion to a total knee replacement, however, if unexplained pain is persistent after a total knee replacement the options are extremely limited in terms of further surgery.

What are the risks and complications of surgery?

Many knee replacement procedures are performed under a spinal anaesthetic or less often a general anaesthetic. There are small risks associated with these anaesthetics and before your surgery the anaesthetist will discuss the risks and benefits specific to each of these with you.

It is now routine for patients undergoing joint replacement surgery to attend a pre-assessment clinic where general health issues can be identified and 'fine-tuned' in advance. This is to make sure patients are as fit as possible and reduce any general health risks,

but, there are still tiny risks of general health complications such as a heart attack or a stroke.

Knee replacement surgery brings with it a risk of some specific complications. Any joint replacement, be it partial or total, runs the risk of infection. Were a joint replacement to become infected, it could require revision (re-do) surgery and this could render a patient worse than prior to surgery. Great care is taken to make the risk of infection as small as possible. For instance surgery is performed in modern, clean air operating theatres with special air filters and antibiotics are given routinely during the operation. Despite these measures infection can still occur but it is rare.

Clots in the leg (Deep Vein Thromboses) can complicate knee replacement surgery. These can be troublesome and cause permanently painful swollen legs. Were clots to form, break off and travel to the lungs, causing a blockage, they can be fatal this is known as a Pulmonary embolism (PE) and is thankfully very uncommon. Preventative (prophylactic) measures are employed to reduce the risks of blood clots. For example you may be offered stockings to wear, blood-thinning injections are given whilst in hospital and tablets are given after discharge to try and prevent clotting. Despite these precautions, clots can still occur but the risk of a serious clot has a risk of less than 1%.



Interestingly there is scientific evidence that the risk of all complications except the need for a re-do operation are a bit lower after a partial knee replacement compared with a total knee replacement.

Any joint replacement may wear out and fail and can come loose, requiring revision. With modern techniques and implants the number of knee replacements (partial and total) that now come loose is small.

Before surgery

It is of great importance before considering surgical treatment for arthritis of the knee that your general health and mobility are considered. It is quite often surprising how symptoms from an arthritic knee may be dramatically improved with even a modest reduction in weight. Indeed, overweight patients are always encouraged to try and diet prior to surgery, to lessen both surgical and anaesthetic complications which are increased with obesity.



Regular exercise and a physiotherapy guided program can often ease symptoms in knees which have severe arthritis, delaying the need for surgery. However, once severe arthritis is present, it is often just a matter of time before symptoms deteriorate to such a level that surgery needs to be considered.

General health problems such as diabetes, high blood pressure and angina need to be as well controlled as possible prior to considering major surgery.

Attention to poor dentition (teeth) prior to joint replacement surgery is needed to minimise the possible chance of an entry route for infection and tooth decay is a potential source of infection after a knee replacement.

Your surgeon should discuss with you what he or she feels is the best operation for your knee and when you should consider surgery. Sometimes there may be more than one surgical option and no absolute right answer as to which procedure is the best for you so that different surgeons may have different opinions.



The pre-operative assessment appointment

You will have been given a date for your pre-operative assessment appointment after you were put on the waiting list at your outpatient visit. The purpose of this clinic attendance is to assess your general health. At this appointment we can note and treat any problems, if necessary.

The Pre-Operative Assessment Nurse will discuss your stay in hospital and organise all the tests and care that you need to have in preparation for your operation. The range of tests may include the following:

- Blood
- Urine
- MRSA
- Heart – by ECG (heart tracings)
- X-rays

We will also discuss with you the plan for your admission to and discharge from hospital. You may also need to see a physiotherapist at your appointment. They will ask you about your home and social circumstances in order to plan your discharge from hospital. Aids or adaptations that you may need to help your recovery may be provided by Social Services. The team will assess your needs and discuss this with you at the pre-operative assessment clinic.

When you go home after your surgery you will need someone to help you. If you do not have anybody, a home care assessor can discuss your needs with you. Not having any help arranged before your admission may delay your surgery. After your operation any arrangements made will be discussed with you to make sure they are still meet your needs.

It is helpful if you think of how you are going to manage at home after your operation before you come to your pre-operative assessment clinic appointment. Further details about your visit to the pre-operative assessment clinic will be sent to you with your appointment letter.

What should I do if my medical condition changes after my pre-operative assessment clinic?

If you have had any changes to your health after visiting the pre-operative assessment clinic please contact us as it is important that we know.

When will I know the date of my admission?

You will already know your surgery date by the time of the pre-assessment clinic.

What to expect on the day of surgery?

You will usually be admitted to the ward on the day of your operation. You will be seen by a number of people prior to going to theatre, including your anaesthetist and surgeon. Your surgeon or a member of the surgical team will mark the leg that is being operated on. A physiotherapist will usually see you to advise you what to expect in the coming days. Any final questions that you may have thought of should hopefully be answered before you go to the operating theatre.

What happens in hospital after surgery?

The day after your surgery (and sometimes the same day), you will be out of bed. You are likely to feel fairly 'washed-out' and in pain. Knee replacement surgery is very painful and painkilling medication will be given as needed, but, most strong painkillers have side effects such as making people drowsy, queasy or even a little confused. Because of these side effects the hospital staff will try to give you the minimum amount of painkillers needed to take the edge of the pain so that you can manage it but you can expect some discomfort. It is important to try and get you mobile as soon as possible and a physiotherapist will help you to do this with a frame or crutches.



Before discharge, you will be competent to walk with crutches and climb stairs. Please bring your day clothes into hospital with you. You will be expected to get dressed after your surgery.

Eating and drinking again

You may be allowed to have a drink about one hour after you return to the ward and then about two hours you will be allowed to have food if your condition allows. It is not unusual to have a poor appetite for a week or two after surgery like this. Your appetite should return to normal slowly but even if you are not eating normally, it is important to drink plenty of fluid as this helps reduce the risk of DVT and PE. If you need advice, speak to the ward staff who will be able to help you.

Will my relatives be able to visit on the day of my operation?

Yes, sensible visiting is encouraged although not too many visitors at once and not for too long. Surgery such as this is tiring and you will need your rest. If you are having therapy your visitors may be asked to wait until you have finished your treatment.

What about wound care after surgery?

After surgery, your wound will be covered with a dressing that should be kept in place until the wound is sound. Many surgeons use dissolving stitches and therefore, the need for suture removal may not be necessary.

How quickly can I return to normal activities such as driving and return to work?

After partial knee replacement, you can expect to need to walk with crutches for perhaps two or three weeks. Driving is usually resumed after four to six weeks, depending on your mobility and progress with the physiotherapist.

If you are aiming to return to work behind a desk (or other sedentary occupations) this should be possible after six weeks. Heavier activities may require a further few weeks off work.

After partial knee replacement, you are encouraged to walk short distances regularly. An exercise bike is an excellent way to rehabilitate your knee, once there is sufficient bend. This usually occurs after four weeks. Return to most recreational activities occurs after a couple of months, depending on the individual. After a Total Knee replacement

you will rehabilitate in a similar way but because it is a bigger operation it is normal for your recovery to be slower and more prolonged than after a partial knee replacement. It can often be three months before you are fit for work after a total knee replacement.

After knee replacement, many patients return to all the activities they wish, including golf, social tennis, cycling and even long walks in the countryside. The aim of partial knee replacement is to try and maximise your ability to return to these activities and do all you want to do.

Will I still have treatment after discharge from hospital?

Your surgeon will arrange to see you a few weeks (usually six) after your surgery to ensure that all is settling. It is also usual for you to be seen some months after your operation for a check x-ray, to ensure you have recovered properly.

You will also usually see a physiotherapist after discharge from hospital. Outpatient physiotherapy may consist of two or three appointments after partial knee replacement, as patients usually regain a reasonable level of function fairly quickly. After a Total Knee Replacement more physiotherapy may be needed but your treating physiotherapist will make these decisions on an individual basis depending on your recovery.

You will receive a brochure on physiotherapy, this advice is suitable for both Total and Partial Knee Replacements. Please read this as it contains important information on exercises and your recovery and bring it with you when you come into hospital for your operation.

Please remember to return all aids, which have been loaned to you, when you no longer need them.

Other information

Please visit

www.sheffielddorthopaedics.com to

see more information and some patient's comments

NHS choices website

<http://www.nhs.uk/conditions/Knee-replacement/Pages/Kneereplacementexplained.aspx>

References

1. National Joint Registry 12th Annual report 2015.
2. NHS digital PROMS publication August 2016-09-17



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