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## Patient Information

# Knee replacement surgery

### What is a total knee replacement ?

A total knee replacement (TKR) is a surgical procedure whereby the damaged or worn cartilage and several millimetres of bone beneath it are removed in the knee joint. This removed bone and cartilage is then replaced with metal components (usually titanium-based). These pieces are then fixed onto the ends of the femur (thigh bone) and tibia (shin bone) and a piece of special, long-wearing, plastic (highly cross-linked polyethylene) is placed between them. In some cases, the cartilage on the underside of your knee cap (patella) may also be replaced. Just like there are many makes and models of motorcar, there are many different brands and sizes of knee replacements. Associate Professor Kurmis will choose a type of knee replacement that best suits your knee and desired function.

### When should I have a knee replacement ?

Every patient is different. The right time to have a knee replacement is usually when the pain or poor function (or both) associated with the worn out knee becomes more than you wish to put up with, and whereby these problems can no longer be managed to your satisfaction by other means. For most people, this means once they have reached a stage whereby safe levels of pain killers no longer keep the pain 'tolerable' and the loss of function (as a result of the worn out knee) is stopping you from doing the everyday things that you need to (or would like to be able to) do. It is important to remember that an x-ray doesn't determine when you need a knee replacement, ultimately you do. The best time for a knee replacement is usually when you have come to the decision yourself that 'enough is enough' and you are ready for the surgery, not when someone else tells you that you 'need' one.

### Realistic expectations

It is very important to have a realistic expectation of your likely outcome after joint replacement surgery. The role of a knee replacement is to replace a painful or poor functioning knee with an artificial one. In the vast majority of cases, pain is much improved (but not necessarily zero) and the knee bends and straightens better. It is important to remember that the knee replacement will not behave like the knee of a healthy 20 year old ! The knee will have a numb patch on one side of the midline scar. It will be sore for several weeks (you will be prescribed pain killers to help), and likely swollen for several months. You will need to work hard with your physiotherapist and on your own with your knee rehabilitation exercises. It may take up to one year to reach 'full' recovery from your operation. A knee replacement operation will not fix other issues in your body outside of the knee joint itself – i.e. back pain, referred hip pain etc.

### How long will my joint replacement last ?

The Australian National Joint Replacement Registry (ANJRR) suggests that more than 90% of knee replacements should be well functioning after 15 years.

### Potential risks

All operations have risks, no matter how 'routine' or 'safe'. While most of the concerning potential risks associated with knee replacement surgery are rare, even if the risk is one-in-a-million, someone is that one person and, for them, that event can be catastrophic. Associate Professor Kurmis will discuss the key potential risks with you before surgery. Some such risks include:

- Risks associated with the anaesthetic
- Infection
- Blood loss +/- need for transfusion
- Blood clots (DVT and PE)
- Ongoing pain and/or joint stiffness
- Damage to important nearby structures
- Need for future re-operation

### Should I have a computer-navigated or robot-assisted knee replacement instead ?

Knee replacements can be performed using 'conventional' techniques, or assisted using computer- or robotic technologies. There are potential advantages and disadvantages to all three options. Associate Professor Kurmis will discuss these with you to help you make the choice that best suits your knee.

### How long does the operation take ?

A knee replacement usually takes between 35 and 90 minutes, depending on the complexity.

### How long will I stay in hospital ?

Most people stay in hospital for 2 or 3 nights. Some stay a little longer, some are safe to discharge earlier (some even within 24 hours).

### Will I need medications after surgery ?

Yes. Associate Professor Kurmis and the in-hospital medical team will prescribe medications for pain management, anti-blood clotting, nausea control, antibiotics to reduce infection risk, as well as those which promote healthy bowel function and sleep (if needed).

### Preparing for surgery

A series of very important steps and appointments should take place prior to your planned surgery to try and optimise your result:

- Meet with your anaesthetist
- Meet with your peri-operative physician (the doctor who will look after your day-to-day medical care while in hospital)
- Meet with your physiotherapist for assessment and begin the exercises they show you before surgery (i.e. 'pre-habilitation'). The better condition your muscles can be around the knee prior to surgery, the better you are likely to do after surgery.
- Meet with one of the hospital pre-admission nurses
- Have any necessary pre-operative imaging and blood tests done
- Try to optimise your body weight
- Eat a healthy and balanced diet

- Quit (or at the very least heavily reduce) smoking
- Prepare an accurate list of your regular and 'as needed' medications
- Consider alterations to your home environment prior to your planned surgery to aid your post-operative recovery (i.e. hand rails, ramps, shower chairs etc.)
- If necessary, organise a responsible person to stay with you (or to stay with) for a few days after you discharge from hospital

### What to expect after surgery

Once your operation has finished, you will be transported to a 'post-anaesthetic' area where highly skilled nurses will monitor your recovery. Once you have achieved a series of routine safety checks, you will usually be transferred to either your room on the main ward, or to HDU (if recommended by your anaesthetist).

Most patients will take steps (walk) within the first 24 hours. You will have pain from the surgery, and will be offered a series of pain killers to keep the pain 'tolerable' – the pain will not be 'zero' in the first 2 weeks. A physiotherapist will see you on the ward and will start the process of teaching your new knee to perform like a well-functioning knee (not like the worn out one you had!). The physiotherapists will guide your rehabilitation to meet your needs for discharge (including considering your home environment). They will show you a series of exercises to optimise the function of your knee as it recovers.

There are only 3 basic requirements for discharge:

1. You need to be safely mobile
2. Your pain needs to be adequately controlled
3. You need to be confident you are ready for discharge

Remember, staying in hospital beyond the point you are deemed 'safe' and appropriate for discharge can actually slow down your long-term progress!

### What can I do to help get the best out of my knee replacement?

The following tips may help:

- Use your pain killers (as prescribed)
- Ice your operative knee for 20 minutes every 2 – 4 hours (while you are awake)
- Do your movement exercises!
- Take the anti-blood clotting medication as prescribed (& for the length of time as prescribed)
- Have regular reviews as directed by your physio
- Remember that the knee is still 'healing' for up to one year after surgery
- Aim to maintain a healthy body weight
- Avoid smoking
- Do not use hydrotherapy or public pools until 'cleared' to do so by Associate Professor Kurmis
- Stay active and try to engage regularly in low impact activities

### When can I drive a car again?

If you have had a left-sided knee replacement, you can drive (an automatic car) as soon as you can safely get yourself into and out of the vehicle, and you are off opioid-based pain killers. If you have had a right-sided knee replacement, or if you drive a manual car, it is usually 6

weeks before most people are safe to drive independently again. Your physiotherapist will help assess your recovery post-surgery and may be able to give you specific advice on when they feel you are safe and ready to drive again.

### Post-operative care

After you have left the hospital, you will be advised to continue the exercises your physiotherapist has taught you. Most people will benefit in the first few weeks from regular ice therapy and/or a compression bandage. It is important that you continue to work on bending and straightening the knee, especially in the first two weeks after surgery, as the knee will otherwise start to stiffen up (i.e. not bend well) and this can sometimes not be recoverable. You should take your pain killers, as prescribed, to facilitate completion of your knee exercises. Walking or stationary bike riding can be excellent in the first few weeks.

Associate Professor Kurmis and his team will usually arrange a series of reviews in his rooms after surgery to monitor your recovery and will inform you of when these are scheduled.



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Please note that this information sheet is intended to aid understanding regarding knee replacement surgery, as performed by Associate Professor Kurmis, and is not designed to substitute for proper clinical consultation.