



Knee Joint Replacement Information for Patients and Families



This booklet has been designed to give you and your family information about your joint replacement operation. It outlines what to expect when you come in for your surgery and what you will need to do before and after your operation.

The staff at Epworth are committed to making sure you have a positive experience. Evidence shows that patients are most satisfied after their surgery when they have a clear understanding of their operation, recovery and rehabilitation.

The information in this booklet has been compiled in consultation with orthopaedic surgeons, nurses, physiotherapists and occupational therapists. It is to be used as a guide only so please follow your surgeon's specific advice regarding your total knee replacement.

Each patient is unique and it is quite common for two patients undergoing exactly the same procedure to experience a very different recovery.

The Knee Joint

The knee joint is made up of the thigh (femur) and shin (tibia) bones as well as the back of the kneecap (patella).

The bone surfaces are covered by a smooth cartilage which provides a cushioning surface so that the bones move easily. The bony surfaces are also lubricated by fluid which is present in the joint. The cartilage and the lubricating fluid enable the knee joint to move smoothly and painlessly.

Common causes of knee pain

A total knee joint replacement is an operation performed to replace a damaged knee joint. When the cartilage is worn out, the bone ends rub on one another and can cause pain and stiffness. Arthritis is the most common reason for the cartilage wearing out. There are different types of arthritis including osteoarthritis, rheumatoid arthritis and arthritis that develops following an accident or trauma.

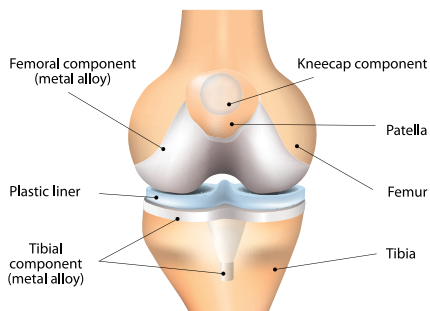
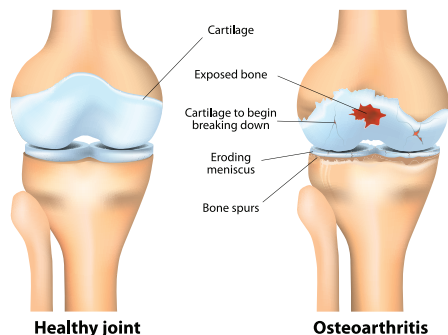
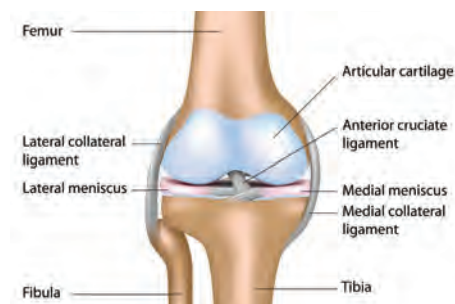


Figure 1 – Healthy Knee / Arthritic or worn knee / Knee replacement

Preparing for your Knee Replacement Surgery checklist

- Complete hospital admission paperwork, preferably on line. This is required at least one week before your admission.
- **Email and phone support**
Due to COVID-19, there are no preadmission clinics until further notice. If you require immediate assistance, please contact your surgeon.
Epworth Richmond and Freemasons
Email: ER-OrthoJointClinic@epworth.org.au
Phone support available Tuesday/Wednesday 7am-3pm
Clinical Liaison Research Nurse: Phone 03 9426 8500
Epworth Eastern
Email: Tracy.mann@epworth.org.au
Phone support available Thursdays 8am-4.30pm
Pre Admission Nurse, Tracy: 0466 169 765
Epworth Geelong
Email: EG-Preadmisssions@epworth.org.au
Phone support available Monday/Wednesday/Friday 9am-4pm
Katrina: 03 5271 8297
Epworth Rehabilitation
Phone: 1300 46 73422
Email: rehab@epworth.org.au
- Your surgeon may request a medical evaluation by a specialist physician.
- You will require routine pathology tests (Blood test, ECG, and possibly a urine sample and x-ray).
- Your surgeon or physician will give you details on which medications to cease or continue to take. Be sure to advise your surgeon of any diabetic, blood thinning, anti-inflammatory or herbal medicines you may be taking.
- Advise your surgeon of any major dental issues requiring attention. It is generally better to have this done prior to joint replacement surgery.
- It is safe to travel in a car as a passenger following a total knee replacement. Organise transport home with your support person.

Day of admission to hospital

You will be instructed by your surgeon what time to arrive at the hospital. It will generally be on the day of surgery and may be very early in the morning.

You will be required to fast from food and fluids prior to surgery. Your surgeon will advise you when to stop eating and drinking according to your scheduled surgery time.

Once admitted, you will meet your anaesthetist who will discuss with you in detail the type of anaesthetic to be used.

You should bring the following items with you to hospital:

- > Your own regular medications in their original boxes.
- > Xrays/Scans.
- > Toiletries.
- > Nightwear – shorts and t-shirt or nightgown.
- > Comfortable day clothes such as a tracksuit/exercise clothes.
- > Comfortable rubber soled shoes or slippers which are enclosed – slip on shoes or shoes without a back are not acceptable.

- > Crutches – if you already have a pair. If not they will be organised by your physiotherapist after your operation.
- > Pick up stick, long handled shoe horn and other long handled aides if you have them.
- > **Please leave your valuables at home. The hospital safe is available for small items only.**

After the operation

You will wake up in the recovery room and be closely monitored. When you are medically stable and comfortable, you will be transferred to the Orthopaedic unit.

Pain Relief

It is normal to have some pain following major surgery. The team caring for you will ensure your pain is well controlled. It is important to be proactive in asking for pain relief. As your pain improves you will gradually require less pain medication. You will be supplied with pain relief medication on discharge.

Wound Care

Following the surgery you will have a dressing over your surgical wound. The nurses will monitor it and change the dressing if required. Further instructions will be given to you prior to going home.

Blood Clot Prevention

Following surgery you are at increased risk of developing a blood clot in your legs or lungs. A combination of approaches are used to prevent blood clot formation which include:

- Getting out of bed on the day of surgery or the following day.
- Regular foot/ankle exercises following surgery.
- TED stockings.
- Calf or foot pumps to help blood flow.
- Anti-coagulant medication to *thin the blood*. This is administered by injection or in tablet form.

Notify your treating team if you develop any of the following blood clot warning signs:

- Pain in your leg that is unrelated to your incision.
- Tenderness or redness in your calf.
- Excessive swelling of your thigh, calf, ankle or foot.
- Shortness of breath.



Food and Fluid

Each patient responds differently to an anaesthetic and when you return to the ward your nurse will assess when you can begin eating and drinking. Some medications and your decreased activity level will often disrupt your usual bowel pattern. A mild laxative may be given to assist with constipation.

Swelling

Swelling is normal after surgery. There will generally be some swelling for at least 6 weeks but it may persist for up to 6 months. Your swelling may become worse throughout the day as you exercise.

To reduce swelling, ice will be regularly applied to the surgical area. Rest periods are recommended between daily activities and physiotherapy sessions.

Physiotherapy

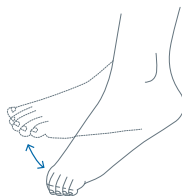
Following surgery, your physiotherapist will assist you to complete a daily walking and exercise program. The exercises provided are aimed at restoring the range of movement and muscle strength in your operated leg and should be completed four times a day. A copy of these exercises can be found in this booklet. It is a good idea to practise these exercises before coming in for surgery (within your pain limits) as they will be beneficial to your recovery. Your physiotherapist will initially commence you on the bed exercises and progress you to sitting then standing exercises when you are ready.

Your physiotherapist will also help to get you up out of bed and walking either on the day of your surgery or the first day after your surgery. You will begin walking with the support of a frame and your physiotherapist will progress you on to crutches when you are ready. The aim is to increase the distance and independence with your walking each day. Most patients require 1-2 crutches for up to 6 weeks post-surgery and your physiotherapist will help guide you on when and how to wean off your crutches.

Bed exercises

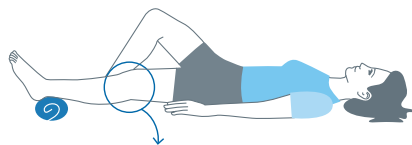
Foot and ankle pumps

Pump ankles up and down.
These should be done firm and fast.
Repeat 20 times hourly.



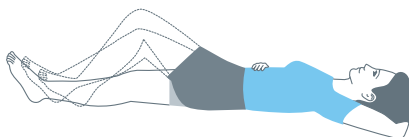
Tighten thigh muscle

Place rolled towel/foam roller under heel. Tighten thigh muscle by pushing knee down into the bed.
Hold 5 seconds.
Repeat 10 times.



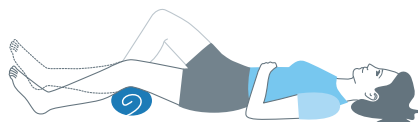
Knee bending

Bend knee by sliding heel towards bottom.
Repeat 10 times.



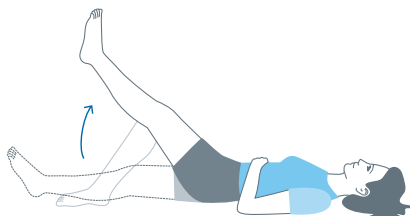
Straighten knee over roll

Straighten knee over rolled towel/foam roller.
Hold 5 seconds and lower slowly.
Repeat 10 times.



Straight leg raise

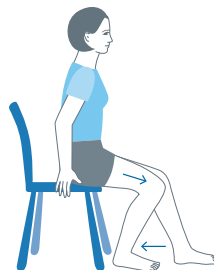
Lock your knee out straight and raise off the bed (approx 30cm).
Hold 5 seconds and lower slowly.
Repeat 10 times.



Seated exercises

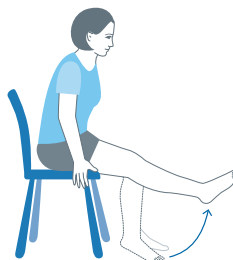
Seated knee bends

Whilst seated, bend knee back under chair as far as possible.
Repeat 10 times.



Seated knee extension

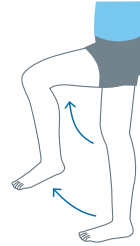
Whilst seated, straighten your operated knee fully.
Hold 5 seconds.
Repeat 10 times.



Standing exercises

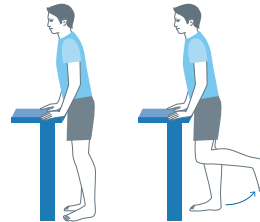
Knee lifts

Bend your hip and knee up as shown.
Repeat 10-20 times.



Knee bending

Slowly bend your knee as shown.
Repeat 10-20 times.



Heel raises

Go up onto your toes as high as you can and gently lower.
Repeat 10-20 times.



Mini squats

Slowly squat a quarter of the way down.
Repeat 10-20 times.

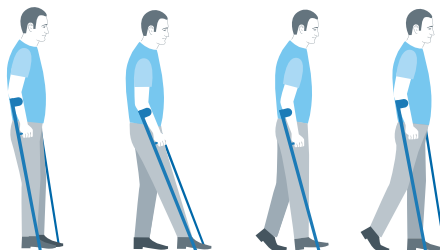


Using crutches

Walking

When walking with crutches the pattern is:

- > Crutches
- > Operated leg
- > Good leg



Going up and down stairs

Your physiotherapist will also teach you how to go up and down steps.

The simple rule to remember is:
“good leg to heaven, bad leg to hell”

Going up steps

- > Good Leg
- > Operated leg
- > Crutches



■ *Bad Leg
(Operated)*

■ *Good Leg
(Non-operated)*

Going down steps

- > Crutches
- > Operated Leg
- > Good leg

Car transfers

To get in and out of the car:

1. Get driver to slide seat back as far as it will go. Then recline the seat back about 45° from vertical.
2. Begin by standing with the back of your legs touching the side of the car.
3. Leaving both feet on the ground reach back and place one hand on the back of the seat and one hand on the dashboard to steady yourself. Slide your operated leg forward, and then slowly lower your bottom onto the seat.

4. Lean back, slowly pivot on your bottom to bring both legs into the car together and place your feet in the footwell.
5. Reverse the process to get out of the car.

Tips: Adding a **firm cushion** on the seat will also help you keep your operated knee in a comfortable position and will help you get in and out of the car easier.

You can also put a **plastic bag** on the seat to help you move easier.

After your knee replacement please check with your surgeon for clearance before returning to driving.



Occupational Therapy

Occupational Therapists recommend the following advice prior to being admitted to hospital. Take note of your home environment and implement the simple modifications listed below to make your home a safer place to be after your surgery.

> Living areas

- Ensure that you have clear pathways, remove floor mats as well as exposed cables from each room in your home. Reducing clutter and obstacles will reduce your risk of falls.
- Ensure that you have adequate lighting so that you can see clearly when moving around the house.
- Place commonly used items within easy reach to reduce your risk of falling. Consider using a mobile or cordless telephone so that you will not have to rush to get to the telephone after your operation.
- If you live in a double storey house you may wish to prepare somewhere to rest downstairs during the day to reduce the number of times that you will need to use the stairs.





> Bathroom and toilet

- Make sure your shampoo and any toiletries are within easy reach. Relocate items if located on the floor of your shower.
- Consider slip resistant mats inside and outside your shower to decrease your risk of falls.
- Consider putting your soap inside the toe section of a stocking and tying it to your rail or cold water tap. Doing so will mean that if you drop your soap you will be easily able to retrieve it.
- Have comfortable clothing ready for after your surgery.
- Practice dressing your operated leg before your un-operated leg as this will be easier after surgery.
- Consider the use of an over toilet frame or shower stool.

> Seating

- When sitting on your chairs and bed ensure that your hips are slightly higher than your knee as this will make it easier for you to stand up.

> If you live alone

- Stock the freezer with meals that will be easy for you to prepare when you return from hospital. Consider freezing bread and purchasing long life milk.
- Make sure that food and items in your kitchen can be reached easily. Ideally items should be placed between shoulder and knee height.
- Ensure that your home is well stocked with the staples that you will need after your surgery.
- Ask a friend or family member to assist with shopping or order groceries online.
- Consider temporarily using meal delivery services for when you first go home.
- Arrange someone to help with your cleaning, laundry and tasks such as gardening and taking the bins out.

Planning for Discharge

Following a Total Knee Replacement, most patients return home after a 3 - 5 day stay in hospital and can walk comfortably and confidently with crutches. You will be provided with a home exercise program by your hospital physiotherapist.

Depending on your surgeon's recommendation, your progress, health fund cover and where you live there are a range of follow up therapy options available. Epworth healthcare has a range of rehabilitation services including Rehab In The Home (RITH), outpatient rehabilitation, and inpatient rehabilitation. Epworth Rehabilitation sites include:

- > Brighton
- > Camberwell
- > Geelong
- > Hawthorn
- > Richmond

Notes

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Locations

Epworth Richmond

89 Bridge Road,
Richmond VIC 3121
Phone: 03 9426 6666

Epworth Freemasons

166 Clarendon Street,
East Melbourne VIC 3002
Phone: 03 9483 3833

Epworth Eastern

1 Arnold Street,
Box Hill VIC 3128
Phone: 03 8807 7100

epworth.org.au



In Emergencies:

Present to

Epworth Richmond
Emergency Department
24 Erin Street
Richmond

Phone: 03 9506 3000

Epworth Geelong
Emergency Department
Level 1
1 Epworth Place
Geelong

Phone: 03 5271 7000

24 hours a day / 7 days a week

This resource has been generously funded by the Epworth Medical Foundation.

Epworth Medical Foundation's sole purpose is to help ensure that our patients receive the best possible care now and in the future.

For more information visit www.emf.org.au or phone **03 9426 6132**.

