People caring for people

RAMSAY HEALTH CARE

Total Knee Replacement

Patient Information

SUNSHINE COAST UNIVERSITY PRIVATE HOSPITAL

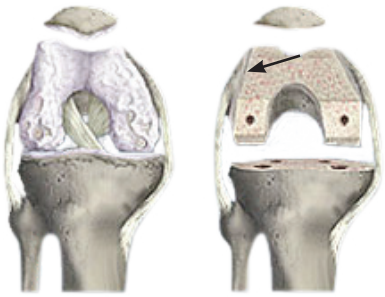
Contents

What is a Total Knee Replacement?

The knee joint is the largest joint in the body and is dependant on the intricate workings of the thighbone (femur) and the shinbone (tibia). It is a major weight bearing joint and is held together by large muscles, ligaments and other soft tissues. In a non-arthritic joint these parts move in perfect harmony to allow the knee to bend, straighten and rotate whilst walking, sitting, bending forward and climbing stairs.

In a healthy knee there is a self-lubricating system of white cartilage to cover the ends of these leg bones. This smooth cartilage acts as a cushion and allows movement. In the arthritic knee, the cartilage has worn away and the surface becomes eroded and uneven causing pain, stiffness and instability. This can severely affect your ability to lead a full and active life.

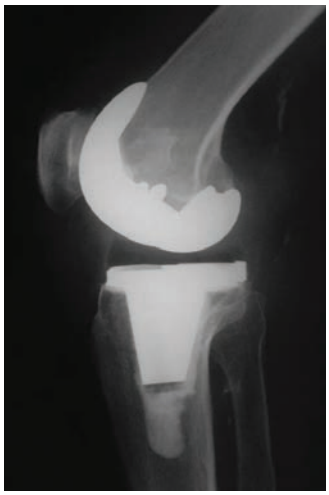
A Total Knee Replacement is performed when the arthritis is severe. The aim of the surgery is to reduce pain and stiffness, correct deformity and provide a stable joint. During surgery, damaged parts of your knee are removed and replaced with artificial parts called prostheses. Your surgeon will choose the appropriate prostheses for you. This new surface allows the joint to move smoothly and without pain.



Arthritic Knee Cut Bone

The arthritic ends of the bone are removed

An artificial knee joint made of special steel and plastic is used to replace the knee joint



Xray after Surgery

Before Your Operation

SKIN CARE

It is absolutely vital that your skin is intact and free of:

- Scratches
- Cuts
- Sores
- Pimples
- Boils
- Insect Bites

If you have any of the above your operation may need to be cancelled.

This means no gardening or pruning in the weeks before your operation.

If you are concerned about a sore on your leg you need to contact your surgeon's office to arrange an appointment to assess your skin.

Pre-Admission Clinic

WHAT TO BRING

- List of current medications
- Details of previous medical and surgical history

In the pre-admission clinic you will be assessed by the following:

Registered Nurse: The Nurse will measure you for TED stockings if required and perform an ECG. The nurse will also inform you regarding what to expect pre and post-operatively and pain management options. Pre-operative procedures and Betadine sponges will be discussed at this time and any appointments made for pre-operative medications if required.

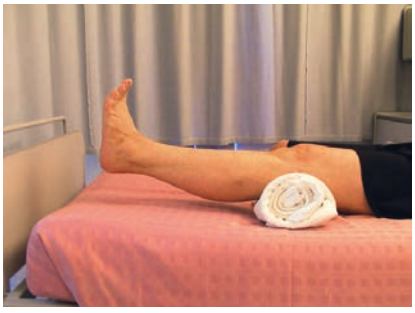
Physiotherapist: The Physiotherapist will assess your medical history and mobility. They will also explain post-operative procedure and mobility aids required for discharge. Specific equipment will be demonstrated eg CPM, if appropriate and specific exercises will be explained and practised.

Occupational Therapist: The Occupational Therapist will assess your home environment and make suggestions for equipment and modifications as required. Your functional level will be reviewed and strategies to optimise independence in self- care and domestic tasks will be discussed. **You may be required to hire/ purchase equipment post surgery**. Your Occupational Therapist will make these recommendations. Community services will also be discussed at this time.

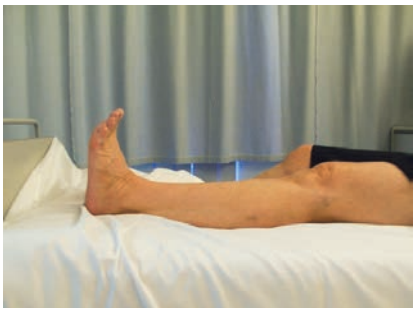
EXERCISE

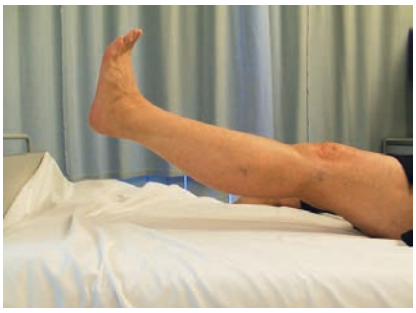
The following exercises will help prepare you for your operation and assist with recovery. The physiotherapist will show you these exercises in the Pre-Admission Clinic. All exercises should be completed 3 times a day.

Static quadriceps – Place a rolled towel under your ankle. Pull your toes toward you and tighten your thigh muscles.
Your knee should straighten fully.
Hold for 5 seconds and repeat 10 times

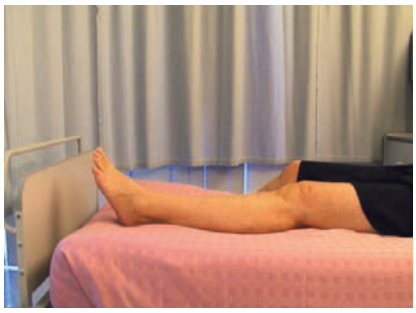


Inner range quads – Place a rolled up towel under your knee. Tighten your thigh muscle and push your knee into the towel and lift your foot off the bed. Hold for five seconds and slowly lower.
Repeat 10 times.

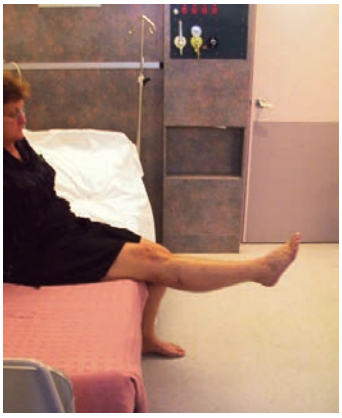


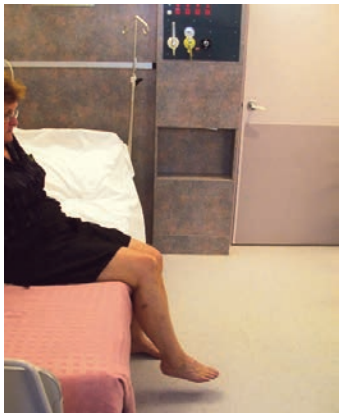


Straight Leg Raise – pull your toes toward you, tighten your thigh muscle and straighten your knee then lift your whole leg off the bed. Aim for about 20 cm off the bed Hold for 5 seconds and repeat 10 times..

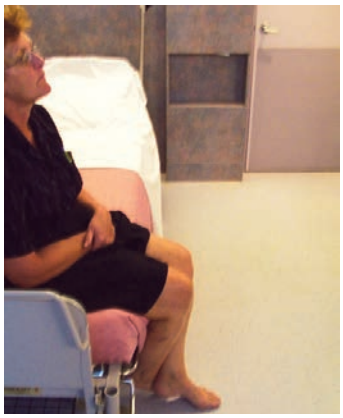


Knee Flexion in bed – Bend your knee so your heel moves towards your buttocks as far as possible. Hold 5 seconds and repeat 10 times.





Knee Flexion in sitting – sit with your leg over the edge of the bed or a chair. Bend your knee back as far as possible. Hold for 5 seconds and repeat 10 times.



To improve the previous stretch hook your good leg in front of your operated leg and gently push back with the good leg. Hold for 5 seconds and repeat 10 times.

HOME ASSESSMENT BY THE OCCUPATIONAL THERAPIST

CHANGES AT HOME

Some simple strategies that you can undertake before coming into hospital include:

- Ensure walkways/doors are not cluttered with furniture
- Remove floor mats and rugs
- Remove or tape down electrical/phone cords or loose carpets
- Ensure floors are free from obstructions
- Arrange storage of kitchenware and clothing at waist height or above to avoid bending
- Ensure that your bed height allows easy transfers on and off
- Ensure that you have a suitable chair with arms, a stable base (no castors or swivel) and of suitable height – approximately 500 -550mm from floor to top of the seat cushion
- Ensure that you have a night light.

Your Occupational Therapist will discuss these and more strategies with you at the Pre-Admission Clinic. If there are any ongoing concerns the Occupational Therapist may do a home visit to assist you in making your home environment safe for you post discharge from hospital.

FAMILY AND FRIENDS

Planning ahead of time will make things easier for you after the operation. You may need some help when you first go home. If possible try to organise friends and relatives to help with shopping, laundry and housework. You may want to stay with relatives for a short period but this is not essential.

Should you live alone with no support, services can be arranged for you on discharge eg. Meals on wheels, shopping, assistance with hygiene and housework. There are charges involved for these services.

If your Surgeon feels Rehabilitation is necessary then they will make the referral from hospital.

WHAT TO BRING TO HOSPITAL

- All tablets/medications in their original bottles/packets (not Webster packets)
- Any relevant hip and chest x-rays
- Glasses, contact lenses, hearing aids
- Loose fitting clothing or pyjamas
- Supportive shoes – these should be flat. Make sure the shoes are not tight as your feet may swell. Heeled shoes, scuffs or thongs are not suitable. Slippers are suitable as long as they have an enclosed heel.
- Walking devices that you normally use
- Toiletries including corn starch powder
- Long-handled reacher etc

Do not bring a large amount of money or jewellery into hospital.

AT THE HOSPITAL

Visiting Hours: 11:00am – 1:00pm
3:00pm – 8:00pm

DAY OF ADMISSION

When you arrive at the hospital, you should go to the admission desk in the front foyer. The staff there will arrange the necessary paperwork and you will be escorted to the surgical ward. Any pre-operative requirements including skin checks, showering and shaving will be completed by the nursing staff.

AFTER THE OPERATION

When you return to the ward after surgery, the nursing staff will check your blood pressure, pulse, breathing and temperature frequently. You must tell the nursing staff about any pain or nausea you may have. You will require oxygen for a period after the operation this is normal. The nurses will tell you when you may start drinking and eating.

PHYSIOTHERAPY AFTER SURGERY

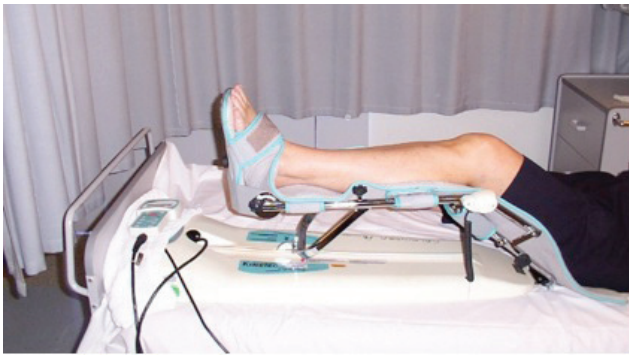
As soon as you wake up from your surgery you should start doing the following breathing and circulation exercises. These exercises help prevent complications such as chest infections and blood clots. You should do these exercises every hour that you are awake.

1. Breathing Exercises: take five long slow deep breaths. Each breath should be deeper than the previous breath. Think about getting air to the very bottom of your lungs.
2. Ankle pumps: vigorously move your ankles up and down 10 times.
3. Thigh squeezes: tighten your thigh muscles and straighten your knees. Hold for 5 seconds and repeat 10 times.
4. Bottom squeezes: tighten your bottom muscles together. Hold for 5 seconds and repeat 10 times.

The Physiotherapist will advise you when to recommence the hip strengthening exercises.

C.P.M. (Continuous Passive Motion)

Some surgeons chose after your surgery to use the CPM machine pictured above. The Physiotherapist will advise you in Pre-Admission Clinic if your surgeon uses the machine and how often it is required.



WALKING

The first walk is usually a short one with the use of a rollator. You will have help until you are safe enough to walk by yourself. After your first walk with the Physiotherapist, staff will encourage you to walk as much as possible. As your walking improves the Physiotherapist will progress you onto crutches or a smaller frame. The amount of weight you can put on your operated leg will depend on your surgeon's instructions.

Remember:

- Always move your walking aid first then the operated leg followed by the non-operated leg.

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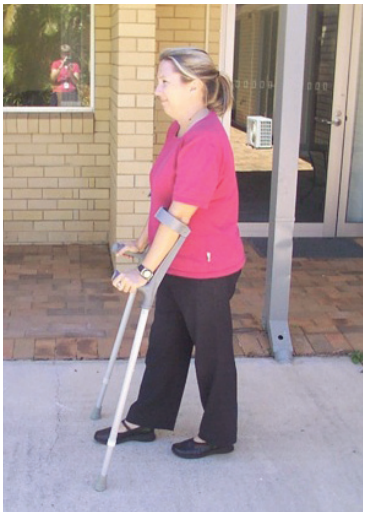
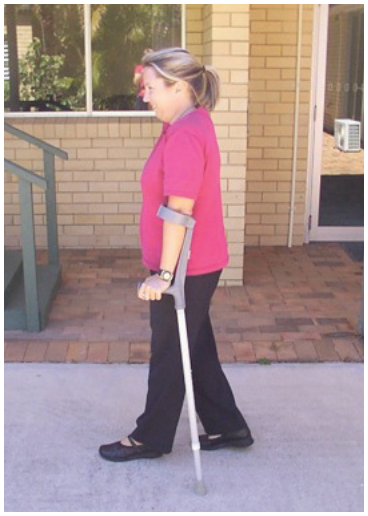
CRUTCHES TECHNIQUE:

A. Crutches forward first



B. Operated leg forward



C. Non-operated leg forward

SITTING

You will be able to sit in a high backed chair when your surgeon allows. This can vary from day one to five following your surgery. Sit out for short periods only in the first few weeks.

To get into a chair:

- Position yourself so the chair is directly behind you and touching your legs
- Keep your back straight and lean back whilst feeling for the arms of the chair
- Slide your operated leg forward as you sit down
- Using your arms lower yourself onto the edge of the chair
- Sit on the edge of the chair and slide your bottom back.

High Backed Chair

To get out of a chair:

- Move your bottom to the edge of the seat
- Keep your feet apart and move your operated leg slightly forward
- Put your hands on the armrests of the chair and push up to stand using your arms and your non-operated leg
- Do not bend forward as you stand up from the chair.

TOILET

An over-toilet frame will be recommended to make getting on and off the toilet easier. Many toilets are too low to sit on in the early weeks following knee replacement. Your Occupational Therapist will discuss equipment options and recommended heights for your toilet. A grab rail can also be of great benefit after surgery. If required, then your Occupational Therapist can make arrangements to install rails to maximise your safety for daily activities.

SHOWERING

The Occupational Therapist will assess the need for a shower chair or stool whilst showering. Some people feel confident to stand following surgery. A rail is recommended in this situation. You may be recommended to purchase/hire equipment such as a shower stool, shower chair or long handled brush/sponge to assist in your completion of tasks. Your Occupational Therapist will discuss this with you prior to discharge from hospital. If rails are required the Occupational therapist will make suitable arrangements.

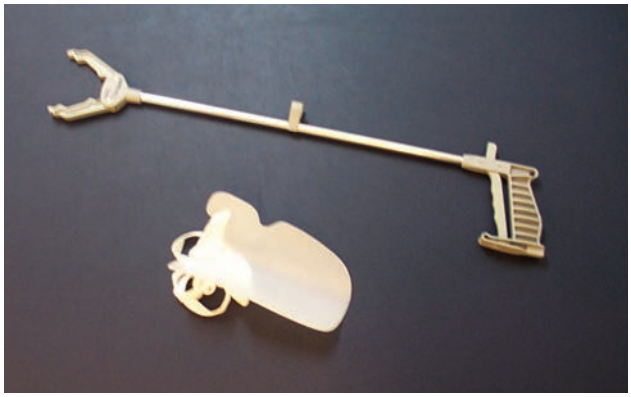
Access in and out of the bath/shower will be discussed by the Therapy team prior to discharge.

Shower Stool

Shower Chair

DRESSING

When dressing sit on the side of the bed or on a firm chair of suitable height. Dress your operated leg first and undress it last. If you are having difficulty bending your knee the Occupational Therapist will demonstrate long handled devices such as long-handled shoe -horn, dressing stick and long- handled reacher to assist in reaching your lower half. It is easier to wear slip on shoes rather than lace ups as you may find it difficult to bend your knee initially.



Long-handled reacher and sock aid

STAIRS

You will be taught how to negotiate stairs by the Physiotherapist before you go home.

Upstairs: "Good leg goes to heaven"

- Non-operated leg up first
- Followed by operated leg
- Followed by crutches






↑ If there is a rail on the stairs use it as picture

Downstairs: "Bad leg goes to hell"

- Crutches down the step first
- Followed by the operated leg
- Followed by the non-operated leg

CAR TRAVEL

Getting into the car:

- Have the seat as far back as possible and angled back slightly
- If possible avoid getting into the car from a kerb or footpath. It is easier to get in from a level road
- Get into the car with your bottom first
- Using the car frame as support for your arms, lower yourself onto the seat
- Take care when lifting legs in
- A plastic bag on the seat may assist with the process
- Some may find their knee difficult to bend adequately when getting into smaller cars. Sitting along the backseat may be an option with a seatbelt fastened

Getting out of the car:

Is the reverse of the above process.




YOU KNOW YOU ARE READY TO GO HOME WHEN:

- You can walk around safely by yourself
- You can get into and out of bed by yourself
- You can get on/off toilet by yourself
- You can walk up and down stairs by yourself
- You can attend to your own cares
- You can bend your knee to 90 degrees.

When you can perform all of these tasks safely and all necessary aids / modifications /services have been arranged you will be ready to go home

Back at Home

PROTECT YOUR NEW KNEE DURING THIS PERIOD BY:

- Avoid twisting by making sure commonly used items are easily accessible eg. Waist height or above
- Move things in small loads
- Use a light weight kitchen trolley to move items around the home
- Only carry items easily managed in one hand if you are using a stick
- Continue with your exercise regime to maximise your range of motion and outcomes of surgery.

HOUSEWORK

You should be able to do light household tasks when you return from hospital

Remember the following:

- Work in short sessions with frequent rest breaks
- Do not stand on anything unstable to reach high windows or shelves
- When doing laundry use a washing basket or trolley where possible
- You may need assistance feeding and cleaning up after your pet
- Use long handled equipment to avoid the need to bend
- Consider pre-preparing meals before coming to hospital.

PHYSIOTHERAPY

The Physiotherapist will discuss an ongoing strengthening program and follow-up Physiotherapy treatment prior to discharge.

DRIVING

You should check with your surgeon before you start driving again. This will usually be four to six weeks after your surgery and depends on whether you have a manual or automatic car.

WORK

Your surgeon will advise you when you can return to work. This will vary depending on the type of work and how you recover after the operation.

DOWN THE TRACK

After a few months you should be back to most of your usual activities. You may find that you can return to activities that you have not been able to do for some time because of your knee pain. Make the most of these improvements by getting back to activities you enjoy. You should avoid heavy loading on the knee joint and any movements that twist the knee or cause pain such as kneeling, jumping or strenuous exercise. Put only the amount of weight on your operated knee as instructed by your surgeon.

TRAVEL

Occasionally a prosthetic device may set off the alarm at the airport checkpoints. Your Surgeon may provide you with a card or letter to identify this to the Airport Security Staff.

FUTURE SURGERY/ DENTAL PROCEDURES

You will need to inform your orthopaedic surgeon if you have any surgery or major dental work done within two years post-operatively. This is due to a possible need for prophylactic antibiotics.

FOOTCARE

It is recommended not to cut your own toenails for 6 weeks after surgery.
A Podiatrist should be consulted as required.

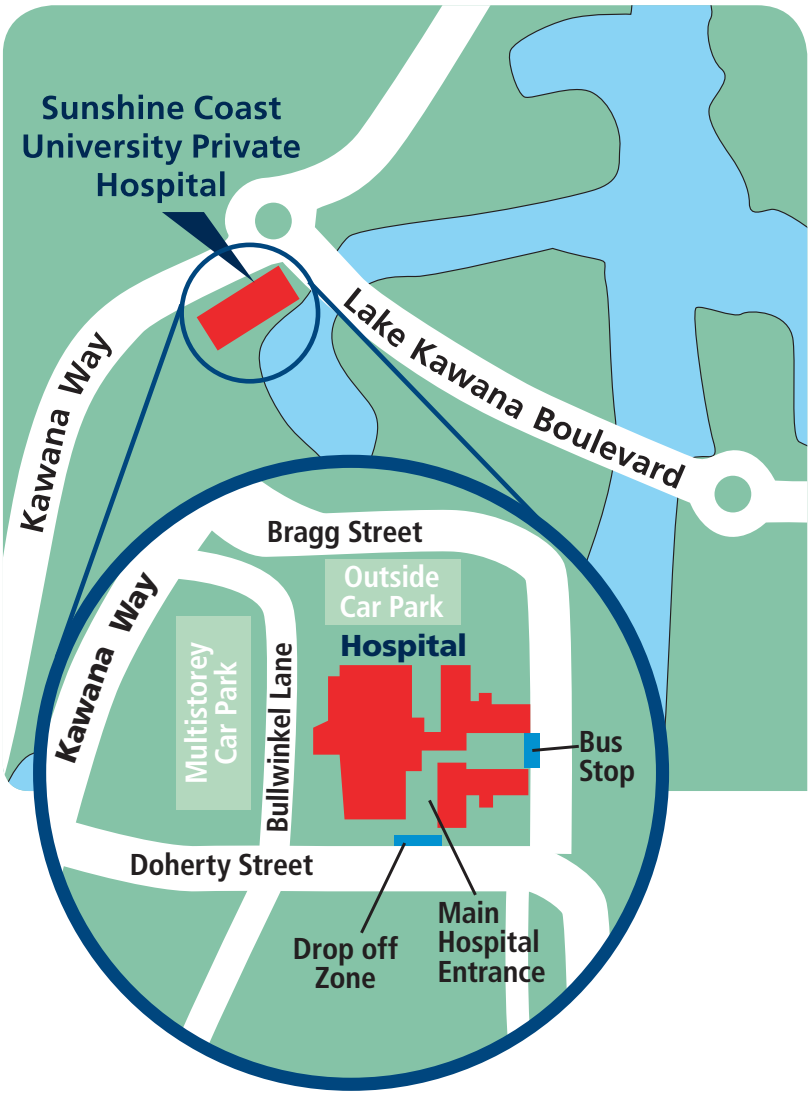
Acknowledgements:

Photographic images and x-rays courtesy of Smith and Nephew,
Southern California Orthopaedic Institute and Dr Allan Clarke

Your notes

Your notes

Your notes



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