

A man and a woman are running away from the camera on a dirt path. The man is wearing a green t-shirt and black shorts, and the woman is wearing a red t-shirt and blue leggings. They are running towards a sunset with a cloudy sky and hills in the background.

# Total Joint Replacement

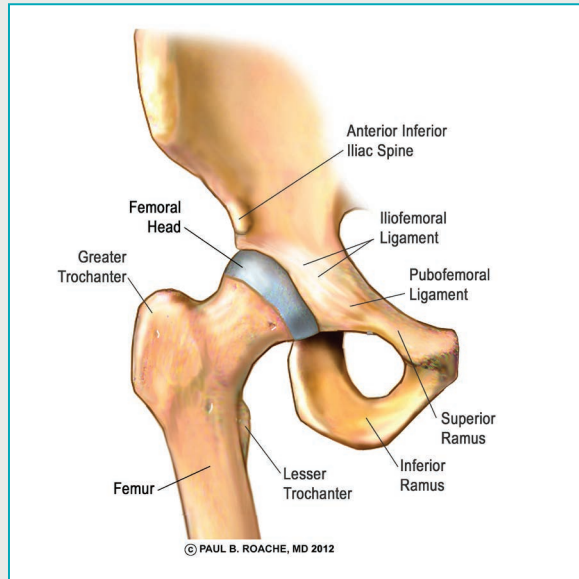


**Nepean**  
PRIVATE HOSPITAL

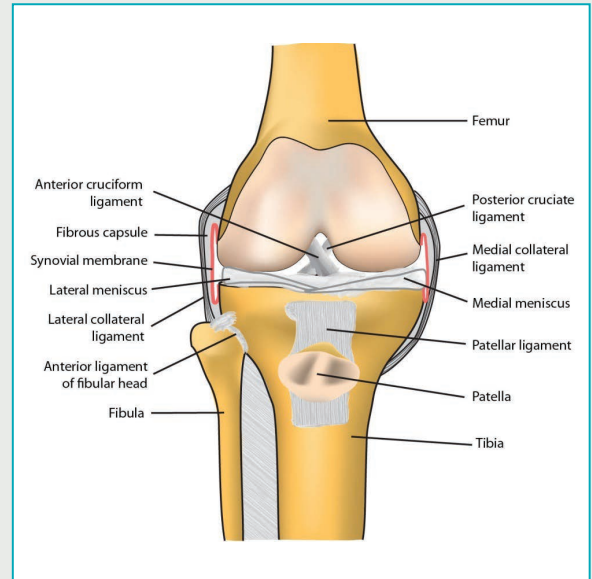
# Welcome to Nepean Private Hospital

## Orthopaedic Hip and Knee Clinic

### Hip (ball and socket joint)



### Knee (hinge joint)



Note: The information on this booklet is to be used as a guide only as each person is an individual and may require differing treatments. It is important that you carefully follow any specific instructions given to you by your surgeon.

## Contents

Introduction .....	2
Total Joint Replacement .....	2
Preparing for admission .....	3
Pre-admission checklist .....	4
What tests will need to be done preoperatively? .....	5
What should I tell the Anaesthetist? .....	6
What else will I need to do before the operation? .....	7
On the day of admission .....	8
Hip precautions .....	15
Knee precautions .....	18
Prevention of complications.....	20
Going to rehabilitation .....	21
What happens when I go home? .....	21
What to expect .....	22
When to contact the doctor .....	23
Precautions .....	23
About us .....	24

## Introduction

This booklet is to provide an understanding of your proposed operation. A well informed patient is better able to participate in their own care during the stay in hospital, ensuring maximum benefit can be gained from joint replacement surgery.

Joint replacement is a major surgical operation. Its main aim is to improve exercise tolerance and way of life by:

- restoring quality of life
- relieving pain
- providing a stable joint
- improving function.

The staff of the Orthopaedic Unit wish you well for a speedy recovery.

## Total Joint Replacement

Total Joint Replacement is an operation to replace the joint that has been damaged, usually by arthritis. The hip, commonly referred to as a 'ball and socket' joint, connects the trunk of the body to the legs through the pelvis. The knee joint is referred to as the 'hinge' joint. These joints are subjected to very high forces during everyday activity.

## Preparing for admission

You and your family should start making plans about how you will manage at home after discharge from hospital. If you foresee any difficulties, talk to the nursing staff or physiotherapist, either at the Orthopaedic Clinic or whilst in hospital, the earlier the better so help can be arranged as necessary.

### **Donating blood:**

You may require a blood transfusion as a result of blood loss during and after the operation. Your Orthopaedic Surgeon will inform you of the processes necessary for your blood donation if required. Three ways of receiving blood transfusions are:

- by prior donation of your own blood in the weeks leading up to surgery (autologous donation)
- by cross-matching your own blood type with that of a registered blood donor
- by transfusion of your own blood which has been filtered from your wound drainage system (autotransfusion).

## Pre-admission checklist

### Have you packed:

Own medications (tablets/eye drops/inhalers)

☐

Eye glasses/hearing aid

☐

Toiletries, night clothes, casual day clothes for three to five days

☐

X-rays or scans (knee or hip, chest x-rays)

☐

### Please do not bring:

- Large amounts of cash
- Jewellery or valuables
- Microwavable heat packs

Please understand that Nepean Private Hospital cannot be responsible for any missing items.

Any electrical equipment, eg. hairdryer or laptop, brought into the hospital needs to be checked by our electrician. Please contact your nurse to have this done.

## What tests will need to be done preoperatively?

A knee/hip replacement is major surgery so both medical and nursing staff will need to know about your health. It is important you tell us about any health conditions you have and if you are taking any medications or herbal remedies.

Some information cannot be obtained by asking questions so your doctor may order any or all of the following tests to determine your existing medical condition.

- Chest x-ray
- Knee/hip x-ray
- Electrocardiograph
- Blood tests
- Urine tests
- A physical examination by a doctor and or anaesthetist.



## What should I tell the anaesthetist?

An anaesthetist will visit you prior to the surgery. Some patients are asked to visit the anaesthetist at their rooms prior to admission to hospital. Your anaesthetist will discuss the different types of anaesthetics and risks available and the various pain medications. They may also request some of the tests on the previous page be undertaken.

### **Generally, the anaesthetist will want to know:**

- How healthy you are, if you have had any recent illness and past operations
- Abnormal reactions to any drugs and allergies to food
- History of asthma, bronchitis, heart problems, sleep apnoea or any other medical conditions
- Whether you are taking any drugs at present including recreational, alcohol, cigarettes, and/or the pill
- If you have any loose teeth, crowns or dentures.

The anaesthetist wants to have the best possible picture of you and your health so the most suitable anaesthetic can be planned. Please answer all the questions honestly as it is really about minimising risk to you.



## What else will I need to do before the operation?

- Stop smoking at least three weeks before surgery. Ask your doctor for more information
- Write down a list of all medications that you are taking both prescription and non-prescription or request a list from your pharmacist
- Ask your surgeon if you need to stop taking any arthritic or aspirin type medications prior to your surgery. As generally **all anti-inflammatory and aspirin medications should be stopped two weeks prior to your operation date. (Please check with your specialist)**
- The night before and the morning of surgery you will need to have a chlorhexidine (Triclosan) shower. Do not wear any deodorant, perfume, talcum powder, make up or jewellery, except a wedding ring
- Your anaesthetist or the hospital will contact you and tell you when to fast from food and fluids.



## On the day of admission

### **Before surgery:**

When you come to the hospital to be admitted, please go to the main reception in the foyer. From there, you will be directed to the Orthopaedic ward.

### **Observations:**

Your pulse, blood pressure, breathing rate, oxygen levels and temperature will be measured on admission and also usually for the next 24 to 48 hours.

### **Questions:**

Your admitting nurse will ask several different questions such as when was the last time you had something to eat or drink to ensure that you are 'nil by mouth', about your medical history and if you have any allergies. The nurse will also ask about medications being taken. Use this opportunity to ask any questions that you may have prior to surgery.

### **Arm bands:**

The nurse will place an arm band around your wrist and one around your ankle.

### **Preparation:**

You will be asked to change into a hospital gown before transfer to the theatre. Your site of surgery will be 'prepared' by applying a betadine solution over the area and covering it with a sterile drape. All jewellery (except your wedding ring) should be removed along with nail polish and hairpins.

**Anaesthetist:**

Your anaesthetist will see you before surgery to talk about your medical history and discuss pain relief post surgery. Before the surgery, you may be asked to take some of your regular medications with a sip of water (regular medications are only to be taken after the anaesthetist has requested that you do so and will be administered by the nursing staff).

**Pain control options for surgery include:**

- Epidural Analgesia may be given prior to surgery. If required, your anaesthetist will insert a tiny threadlike tube in to your back near the outside of the spine. Drugs are continually administered into the tube to numb the area of the operation site.
- Regional (Nerve) Block involves a continuous infusion of local anaesthetic into a thin tube that will numb the operated area. The tube entry site is in your groin.
- Spinal Block involves an injection of local anaesthetic into the spinal space. This causes numbness from the waist down and wears off after 12 to 24 hours.

**Going to the operating theatre:**

A porter will come and collect you from the ward and take you to the operating theatre (you will remain in the bed). A ward nurse will escort you.



## After surgery:

### Recovery:

When you wake up in the Recovery unit after your operation, you will have an oxygen mask on your face and a nurse will be continually checking your observations (pulse, blood pressure etc). There will be a dressing over the surgical site with possibly one or two drains in place to remove any excess blood and fluid from the operation site. Calf compressors will be around your legs, pumping air intermittently. This device promotes circulation and will remain in place for 24 hours. When you have sufficiently recovered, a nurse and theatre porter will take you back to the ward.

### On the ward:

Your pulse, blood pressure and breathing rate will be checked hourly during the post operative period. You will continue to have oxygen for the first 24 hours (if you have a PCA, you will have oxygen for the duration of the infusion). You will have a drip to administer fluids and medications for the next 48 hours. The nurse will also carry out limb observations to check circulation. For hip replacement patients, an abduction pillow will be placed between your legs at all times to prevent dislocation.

During surgery nerve endings are cut or bruised. When this occurs, a message is sent along the nerves to the spine and brain and is interpreted as pain. There are ways to help control the possible pain.

**Medications:**

**Pain relief:** For the first 24 hours, pain relief will either be through your drip, epidural or oral tablets.

**Pain control options include:**

- Patient Controlled Analgesia (PCA) is pain medication delivered via a PCA machine attached to the drip in your arm. You will be able to control this level of pain relief by simply pressing the PCA button. Only you can press the button.
- Oral medications can be used to control pain and inflammation. There are many types
  - of oral medication which may be given in conjunction with injections or infusions to help control different types of pain.

**Scoring your pain:**

To provide adequate pain relief, it is important to tell the staff when you have pain. Adequate pain relief enables you to mobilise and perform exercises effectively, speed recovery and improve ability to rest.

**Nausea**

Anaesthetics and pain relieving medications may cause nausea. Effective anti-nausea medications are available so it is important to ask for them if needed. Avoiding or controlling nausea will help in achieving a well balanced diet necessary to promote faster healing and improve tolerance to exercise. Anti-nausea medication can be given in conjunction with pain relieving medications.

**Antibiotics:**

These will be given through a drip for the next 48 hours to help prevent any infection.

**Blood thinning injections:**

These will be administered after surgery and will continue until discharge. This medication will help to prevent Deep Vein Thrombosis (DVT). Some doctors may prescribe these injections to be continued for three weeks after discharge.

**Nutrition:**

When you return to the ward after your operation, you can have ice chips and sips of water as tolerated. Please tell the nursing staff if you feel nauseated. After you have been back on the ward for four hours, you may commence a clear fluid diet (jelly, soup and apple juice).

**Hygiene:**

After surgery you will be given a wash in bed and you may brush your teeth if you wish. Your nurse will assist you.

**Wound care:**

You may have one to two drain tubes in your wound, which prevents collection of fluid. Some drains can be used for reinfusion. If reinfusion is appropriate, it will occur in the first six hours following surgery. A large dressing will cover your site of operation and will remain intact for the next 24 to 48 hours, depending on your surgeons orders. A small amount of ooze on the dressing is considered normal. The nurses will check your wound regularly.

**Physiotherapy:**

The physiotherapist will see you after surgery and will instruct you on how to carry out hip, knee and mobility exercises, deep breathing and coughing exercises which are to be done every hour.

**Education:**

The nursing staff will provide information about positions to be avoided post surgery. Please feel free to ask the nursing staff any questions that you may have.





## Hip precautions (for hip patients only)

### Falls prevention safety tips

- Use nurse call bell if you need assistance
- Use hand rails in bathroom
- Please listen to nurses and physiotherapists advice with regard to your mobility
- Do not get up quickly from bed or chair, especially after anaesthetic
- Be aware of the location of lighting/switches in your room and bathroom
- Please keep ward clutter to a minimum. Ask family to collect unnecessary items
- Take your time to attend to activities of daily living.

The following precautions are listed as a guide only, and clarification from your surgeon will ensure that you comply with the surgeon's own specific guidelines.

Four basic movements must be avoided for six weeks after the operation. These precautions apply in all positions including sitting and whilst transferring in and out of bed.

1. **Do not** bring your knees higher than your hip, or bend forward too far. This means no sitting on low stools, low chairs, low toilets etc.
2. **Do not** cross your legs - the operated leg must always be kept out to the side, away from the midline of the body.
3. **Do not** lie on either side until you have permission from your doctor. When lying on your 'good side', you will need a pillow between your legs. It is safer to lie on the operated side.
4. **Do not** twist at the waist, or twist the operated leg. The toes and kneecap should always point straight ahead - not to the side.

**Sitting:**

Keep your knee lower than your hip when sitting - check the height of your chair.

Sit in a firm chair with arms, not a swivel or rocking chair. Arms are needed to aid in rising to a standing position.

When getting up, move to the front of the chair, place your operated leg forward, and remember not to lean too far forward. Your un-operated leg should be under the chair.

**Toileting:**

- Use a raised toilet seat for at least six weeks
- All toilets are too low to sit on without a raised toilet seat.

**Getting in and out of bed:**

Always get into and out of bed on the side of the operated leg (unless instructed otherwise by your physiotherapist).

**Picking up objects:**

Avoid if possible but if necessary, then:

- when bending, stretch operated leg out behind you
- when kneeling, kneel onto the operated leg first.

**Dressing and washing:**

To avoid bending over, use long-handled equipment to dress and wash your body. Alternatively, get assistance from your family. You cannot touch your operated leg below the knee without being at risk of dislocating your hip.



## Knee precautions (for knee patients only)

The following precautions are listed as a guide only, and clarification from your surgeon will ensure that you comply with his own specific guidelines.

**Do not lie with a pillow under your knee** as this increases the risk of a blood clot in your leg and also the possibility of a flexion contracture.

### **The importance of exercises:**

Post operative range of motion (ROM) and muscle strengthening exercise regimes are in place to provide you with the most successful outcome.

Early knee movements are encouraged to help you gain maximum benefit from your knee replacement. Commence knee exercises on the first day after the operation to prevent stiffness, and to strengthen the muscles around your new joint.

Initially assistance will be needed with some of these exercises from the physiotherapist, who will also supervise your postoperative exercise program. The goal is to bend (flex) your knee to 90 degrees.

Active knee extension (straightening) is also important to prevent flexion contracture (a permanent bend in the knee).

An exercise regime will be taught to you by the physiotherapists and you are expected to continue this exercise program for a minimum of six weeks after your surgery.

**Sitting:**

- When sitting, concentrate on bending the knee to 90 degrees
- Sit in a firm chair with arms to help you get in and out of the chair with ease.

**In bed:**

- Keep your knee straight
- Avoid lying with the leg rolled outwards or the knee bent
- Do not cross your ankles or legs whilst you are in bed.

**Kneeling:**

Dislocation is not a common occurrence following a total knee replacement; however there are a few positioning limitations. Please avoid sitting in the same position for extended periods to decrease the risk of contracture.

Limit deep knee bending for extended periods.

## Prevention of complications

### Deep Vein Thrombosis:

Deep Vein Thrombosis (DVT) may occur when blood flow becomes sluggish within the veins of the lower limbs, leading to clot formation (thrombosis). Symptoms of a DVT may include pain, redness and/or swelling in the lower leg.

To decrease risk of developing a DVT:

- Lower limb exercises (eg. foot and ankle exercises)
- Early mobilisation
- Anti-thrombotic support stockings (TEDs) - depending on your surgeon's preference
- Anticoagulant medication (tablets and/or injections) - depending on your surgeon's preference
- Use of calf and thigh compression pumps (as per your surgeon's preferences), which rhythmically squeeze your calves and thighs returning blood to your heart for up to 24 hours following surgery.

**NOTE:** DVT's can occur up to six weeks after your operation, although the risk is highest early. If you are worried in any way that you may have a DVT, please ring your GP or surgeon.

### Preventing infections:

Infection is a risk with any surgical procedure because it involves the disruption of your main defence against infection - your skin. The following steps are taken to decrease your risk of infection:

- Keeping your dressing intact
- Taking care not to wet your wound until after your clips/sutures (if used) are removed and the wound has closed
- Antibiotics (as per your surgeon's preference)

## Going to rehabilitation

Rehabilitation is the process of returning to a maximum level of independence following surgery. Rehabilitation will improve your mobility, movement and balance. Rehabilitation can assist you to overcome any difficulties with aspects of daily living eg. dressing, showering.

Your local rehabilitation provider is The Hills Private Hospital.  
For further information, please call **02 9639 3333**.

## What happens when I go home?

### **Discharge Planning:**

Planning for your discharge is very important, as you may need to make adjustments to your lifestyle and home. Discharge planning starts on your admission. If you live alone, you may need assistance from family members. The role of the carer will be to provide you with meals, dry your feet, apply your compression stockings (six weeks) and be the designated driver (six weeks).

If care provided by another person is not possible then going to a rehabilitation facility may need to be considered. These are centres dedicated to providing you with physiotherapy and getting you ready to be discharged home to care for yourself. Stays at rehabilitation centres are generally one to two weeks in duration depending on your progress. If you would like to go to a rehabilitation centre please discuss this with your doctor and nurse on admission so the process of booking a bed can be started early.

You may also need to rent some special equipment, for example a shower chair. Please discuss your needs during your stay with your physiotherapist or nurse.

**Transport:**

It is important to get in and out of the car safely. Use the front seat and push the seat back as far as possible. Back up to the seat, rest the crutches on the car, stand with your leg toward the car, sit back and swing your legs into the car. Avoid driving long distances in one go, stop regularly to stretch your legs. Do not drive in a car until you have discussed this with your surgeon.

**Follow-up appointments:**

You will have a follow-up appointment at your doctor's surgery. Your doctor will tell you how they wish to see you and you will be required to make an appointment at their rooms.

**Exercise program:**

Remember to maintain your exercise program at home and continue to use your walking aid when mobilising to protect your new joint until your doctor or physiotherapist tells you otherwise. You must still wear your TED stockings once you are home for approximately six weeks. Walk and exercise daily, avoid driving, jumping, running, and high impact sports. Overseas travel is not permitted (until cleared by your surgeon) due to the increased risk of DVT. Car journeys are allowed as long as you have numerous breaks along the way to stretch and exercise your legs.

- Some swelling and bruising to the area
- Some pain associated with the incision and after attending exercises.

What to  
expect



## When to contact the doctor

- If you notice any new wound discharge or redness
- If you develop a temperature
- Any new swelling in the leg
- A dramatic increase in pain
- Severe sweating
- Breathlessness, chest pain or palpitations - contact your surgeon, GP or emergency department immediately.

## Precautions

If you intend to get any dental procedures done after your knee replacement surgery please check with your doctor if you need to take any preventative antibiotics.

If you are going to travel by air to any destination within six weeks of having surgery please contact your surgeon to discuss any extra precautions that may be needed.



## About us

Nepean Private Hospital is a modern 109 bed facility providing a wide range of health services to the local community including: orthopaedics, spinal, gynaecology, ENT, plastics, urology and general surgery, endoscopy, cardiology, cardiac angiography and obstetrics.

Nepean Private Hospital has eight operating theatres, one hybrid/cardiac catheterisation theatre and an endoscopy suite, supported by a critical care unit which includes intensive care.

Nepean Private Hospital has established an excellent reputation in the community for its high commitment to customer service, staff satisfaction and quality improvement.

### **Our facilities include:**

- Private rooms
- Private bathrooms
- Air conditioning
- TV
- Phones
- Cafe on site
- Visitor parking
- Radiology
- Pathology
- WiFi.

Nepean Private Hospital is an accredited member of the Australian Council on Healthcare Standards (ACHS) and regularly undergoes an accreditation as part of our commitment to quality healthcare.





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A Healthscope hospital.

ABN: 85 006 405 152



05/2017