



North West
Private Hospital



Total Knee Joint Replacement (TKJR) Surgery

Patient Information Booklet prepared in consultation with Surgical & Nursing staff, Physiotherapist & Occupational Therapist

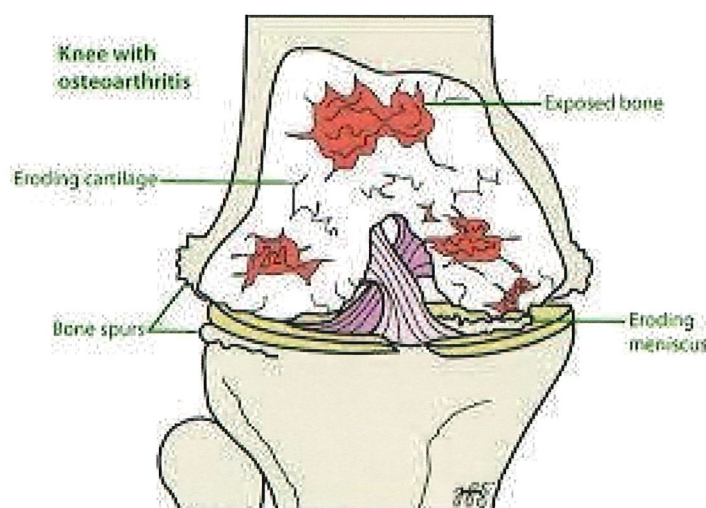


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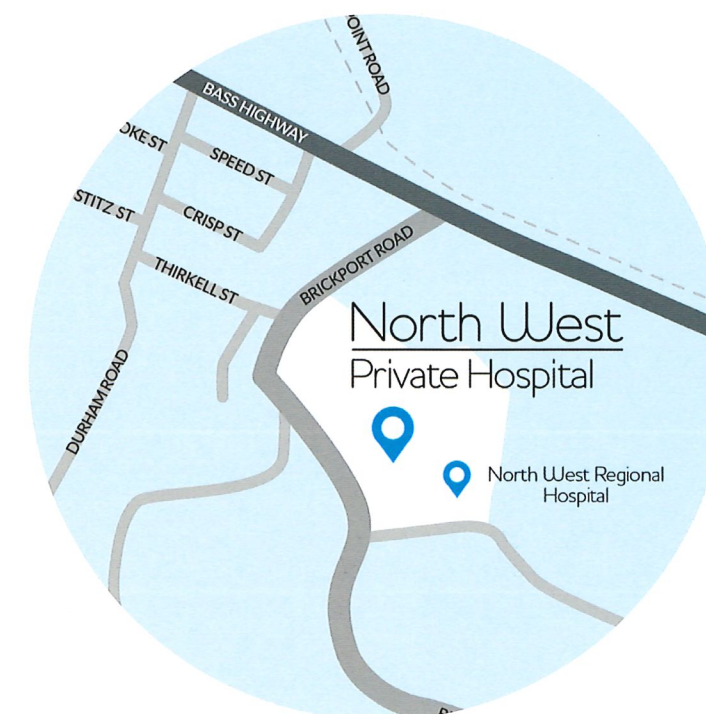
A Total Knee Joint Replacement (TKR) is a major operation. This booklet aims to help you and those involved with your care travel through your surgical journey with a speedy recovery and safe discharge home. This booklet explains the operation procedure and lets you know what to expect before, during and after your hospital stay.

Staff involved in your surgical journey will include your surgeon, physician (if required), nurses, physiotherapists and occupational therapists. Other specialists such as dieticians and pharmacists are available to assist if required.

This is an operation designed to replace the knee joint which has been damaged, usually by osteoarthritis. The surface of these bones is covered by a smooth and compressible substance called articular cartilage. When this covering 'wears away' the underlying bone is exposed.



This often happens with osteoarthritis, causing the joint to become rough and distorted. This can result in pain and limited movement, often with the development of a limp.



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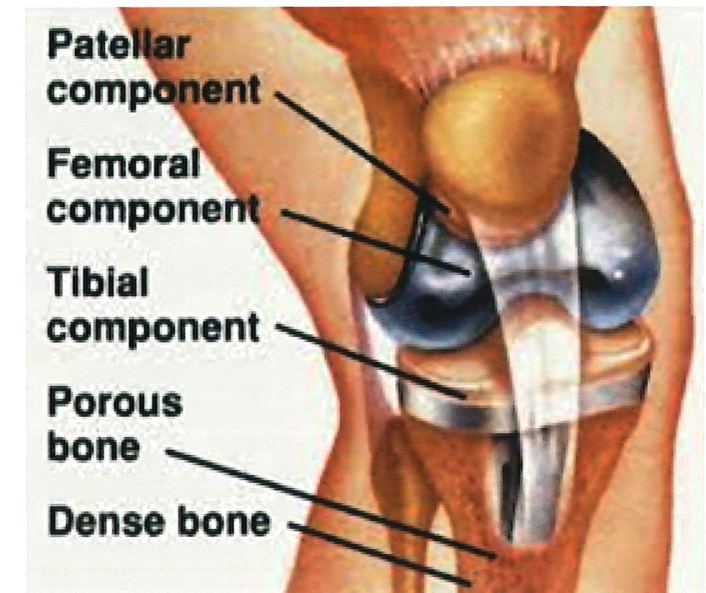
Remember

You **must** follow these precautions and any others you have been given whilst in hospital and on discharge to prevent damage to your new knee.

Please bring this booklet with you to hospital to assist you in remembering the safety precautions you must keep in mind.

A THKR will replace the worn heads of the bones with artificial components that are inserted to realign the joint and correct deformities.

It is hoped the new knee joint will relieve pain and decrease stiffness, increasing your ability and comfort to move.



There are a number of factors that determine how long your operation will take. Please let your family know that it is common for you to be away from the ward for up to 4-5 hours while you are having your surgery. The usual hospital stay is up to five days but this depends on your progress.

Pre-Operative Care (Instructions before surgery)

By the time you are reading this booklet it is most likely you have attended physiotherapy consultations, a pre-admission appointment with a nurse and an anaesthetic appointment.

The nurse would have discussed with you:

- Bass Ward lay out and general information regarding the day of admission.
- Information on Calf Compressors or Foot Pumps that are used during the post-operative phase (usually for 48 hours). These help reduce the risk of blood clots forming after your surgery.
- Information about Clexane (enoxaparin sodium) administration. Clexane is an injection that you will have to give yourself every day when you go home. This is an anticoagulant and helps stop any unwanted blood clots from forming. The usual course of this medication is for 21-28 days following discharge from hospital.
- How to shower with the anti-bacterial skin wash on your day of surgery (prior to admission). This will be provided at your pre-admission appointment.

- Someone will phone you minimum 2-3 days prior to the operation day and inform you when to commence fasting (usually midnight prior to the operation) and the time and date of your admission.

Your anaesthetist would have discussed with you:

- Arrangements for any pathology tests and x-rays that you require prior to admission.
- Stopping any medication that may delay your planned surgery, such as blood thinning agents. If you are diabetic, you should have received advice in regards to your medication for the day of surgery.

Other aspects of your pre-operative preparation include:

- Physiotherapy Assessment

It is recommended for you to have a pre-operative assessment with the hospital physiotherapist. This assessment will provide you with a personalised exercise programme, and a management plan for you to physically and mentally prepare for the surgery. It is important to follow the physiotherapy recommendations to get the very best from your surgery. This is important for your recovery and this journey starts weeks before the day of surgery. Your physiotherapist will discuss and assist you in organising the mobility aids (usually elbow crutches) you will require after your surgery.

Please bring these to the hospital (Available to hire from Coastal Physiotherapy).

- *Occupational Therapy Assessment*

An occupational therapist will contact you prior to your admission. Advice will be given in regards to any additional equipment you may require for your safety once you go home from hospital. A home visit may also be recommended.

Please bring your 'extend-a-hand' with you to hospital.

Driving

Please ask your surgeon when you should recommence driving a car. Usually this is around 6 weeks after your surgery. Have a 'safe area' test drive first to make sure you are able to make an emergency stop. Please check with your car insurance provider as you may not be covered for a period of time post-surgery, even if you feel you are able to drive.

Work

Your surgeon will advise on the length of time you will need to be off work & will supply a medical certificate for your employer if required. The time away from work depends on the type of work you do. Remember to continue the 'safety' rules when you return to work. Talk to your physiotherapist and occupational therapist about what may be required to safely go back to your work.

Sports

After the recovery period you may be able to return to certain sports.

- Walking is recommended but physically demanding and fast paced sports that involve jogging and jumping like football, tennis and horse-riding may not be appropriate.
- Always check with your physiotherapist before recommencing sport or commencing a new sport or exercise.

Gardening

Gardening should be avoided for around 3 months. You may return to it with modified gardening strategies and techniques. Please ask your physiotherapist to discuss safe and comfortable gardening strategies.

Sexual Activity

Sexual intercourse may resume 6-8 weeks after your surgery. General advice is to be the passive partner for 3-4 months.

Discharge & Post Discharge Information

General Advice:

- Continue regular short walks and gradually increase walking distance.
- Expect to feel tired and need to rest during the day.
- Expect to feel some discomfort as your new hip & wound heal.
- You are recommended to continue rehabilitation with a physiotherapist after discharge from hospital.
- Follow the exercises your physiotherapist gives you.
- Avoid crossing your legs whilst sleeping.
- If your operated or other leg becomes swollen, elevate your feet to reduce swelling.

DENTAL TREATMENT: If you are having dental treatment after joint replacement you **MUST** inform your dentist so that appropriate treatment and precautions are taken.

Discharge from Hospital:

When you leave hospital it is preferable to have the assistance of relatives and friends for a few weeks. The decision when to leave hospital will be dependent upon your recovery, mobility, safety, confidence and support when you get home.

If you have indicated, or it is determined during your stay, that you will need some community assistance upon discharge, this will be organised before you go home. You should not return home alone on discharge from hospital as you will need some help with your daily activities for a short period.

Discharge from hospital is usually within 5 days after your surgery. On discharge you should be able to:

- Walk safely with your crutches or other walking aid.
- Get in & out of bed by yourself.

If you have any problems when you get home, please do not hesitate to contact Bass ward and speak to the nursing staff or to contact NWPB and ask your physiotherapist for advice.

Day of Surgery

Please shower with the anti-bacterial wash you were provided prior to presenting at the hospital. This is an important process as it is the first step to killing any bacteria that might be present on your skin.

You are encouraged to wear clean and comfortable day clothes to the hospital and during your recovery period (loose track pants and t-shirts are popular).

REMEMBER to bring any medications you take to hospital with you. Medications should be in their original packaging or in Webster packs only.

Post-operative Care (care after surgery)

After your surgery you will be taken to the recovery unit of the operating theatre. Here, the nurses will make sure you are comfortable and well enough to be transferred to the High Dependency Unit (HDU), where you will be nursed overnight. This unit allows close observation by the nurse assigned to your care.

Immediately following your surgery your temperature, pulse, respirations, oxygen saturation levels and blood pressure will be monitored frequently. Nurses will also regularly be checking circulation, movement and sensation of your legs and feet. This is all very normal.

After the operation you will be required to lay on your back. You will start bed exercises and moving your position on the bed within 2 hours after you arrive to the HDU. This is important for pressure relief and your comfort as well as for circulation and regaining muscle function.



Then, once your condition stabilises, you will be asked to start moving around under the nurse's instruction as we follow the 'Early Mobilisation Protocol'. This minimises the chance of developing post-operative complications such as pneumonia, deep vein thrombosis and pressure injuries.

After the initial 24 hours in the high dependency unit, the frequency of these observations are reduced and you will most likely be moved to a bed in the general ward.

Deep Vein Thrombosis (DVT)

Surgery is one of the major causes of [deep vein thrombosis](#) (DVT), a [blood clot](#) that forms in the deep veins of your body, often in your leg.

[DVT](#) is common after an operation because you're usually in bed for long periods of time while you recover. When you stop moving, [blood](#) flows more slowly in your deep veins, which can lead to a clot.

Clots happen when [blood](#) thickens and sticks together. That can be a good thing when it prevents you from bleeding, but not so much when a clot forms inside your blood vessels. This can be life threatening, if for example the clot travels to your lungs and blocks blood flow.

The risk of developing DVT increases after major surgery, and we take great measures to minimise this risk with blood thinning medication (Clexane), regular fluid intake, calf compressors and having you up and moving about as instructed by your physiotherapist. This will limit blood clot formation, increase circulation and reduce prolonged and unnecessary pressure on your skin.

To decrease your chance of getting a DVT please:

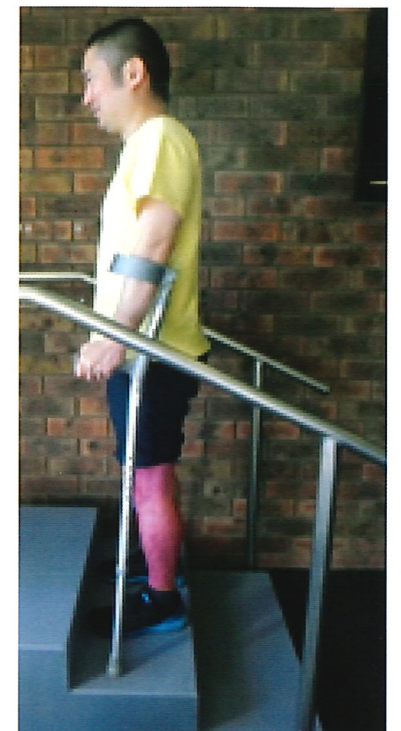
- **DO NOT** Cross your legs while sitting or lying.
- **DO NOT** lay with a pillow under your legs.

(As pictured below)



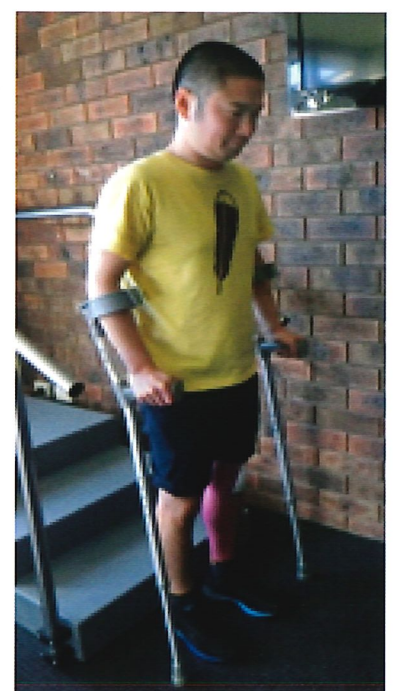
Stair sequence - Moving Upstairs "Going up like GAS"

1. Good leg (Non-operated leg)
2. Affected leg (Operated leg)
3. Sticks (Crutches)



Stair sequence - Moving Downstairs "SAG goes down"

1. Sticks (Crutches)
2. Affected leg (Operated leg)
3. Good leg (Non-operated leg)



When sitting, ensure your feet are comfortably resting on the floor & your hips are higher than your knees to enable comfortable sitting and help with easy standing up. The same posture should be maintained when using the toilet.

Sit with feet close to each other, toes slightly pointing out, and knees slightly apart. You can see your feet between your knees. This helps you to maintain good leg alignment.

Avoid low chairs and backwards sloping seats as they are not easy chairs to stand up from. Recliner chairs should be checked by the occupational therapist, who will visit your home prior to the surgery.



Walking sequence

1. Move your walking aids forward.
2. Operated leg forward
3. Non-operated leg forward

Repeat this sequence and you are walking!



Turning around

Important thing is not to twist your knees. Take a lot of small steps to turn around.

Hygiene

On Day 1 you will be able to have a shower with assistance. A raised height shower chair will be used initially and as your strength improves you may be more comfortable standing in the shower.

Please remember we are here to assist you and do not hesitate to ask for help. Your independence will increase as your recovery progresses and it is better to be extra careful and have assistance in the early days for your safety.



Nutrition & Hydration

You will resume a normal diet and fluids usually 24 hours after your operation. Some people do experience nausea but medication can be given to help this.

You will have an intravenous (IV) infusion of fluid until you are feeling well enough to eat and drink normally.

Prior to surgery, please notify your nurse if you have any special dietary requirements or you have noticed a recent change in appetite and weight loss. Good nutrition is essential to surgical site healing and strength recovery.

Pain Relief & Regular Medications

Pain is an expected experience after surgery and a person's perception of pain is very individual. No two people experience pain in the same way.

You will be asked to try and estimate your pain on a scale of 1-10 when you require pain relief after your surgery and throughout your recovery. The nurse will explain this to you and this scale assists in deciding which pain medication would be the best for you.

Regular pain relief is recommended to keep pain at a 'manageable' level in order for you to continue regular movement and physiotherapy. Please let your nurse know if you feel your pain relief is not working.

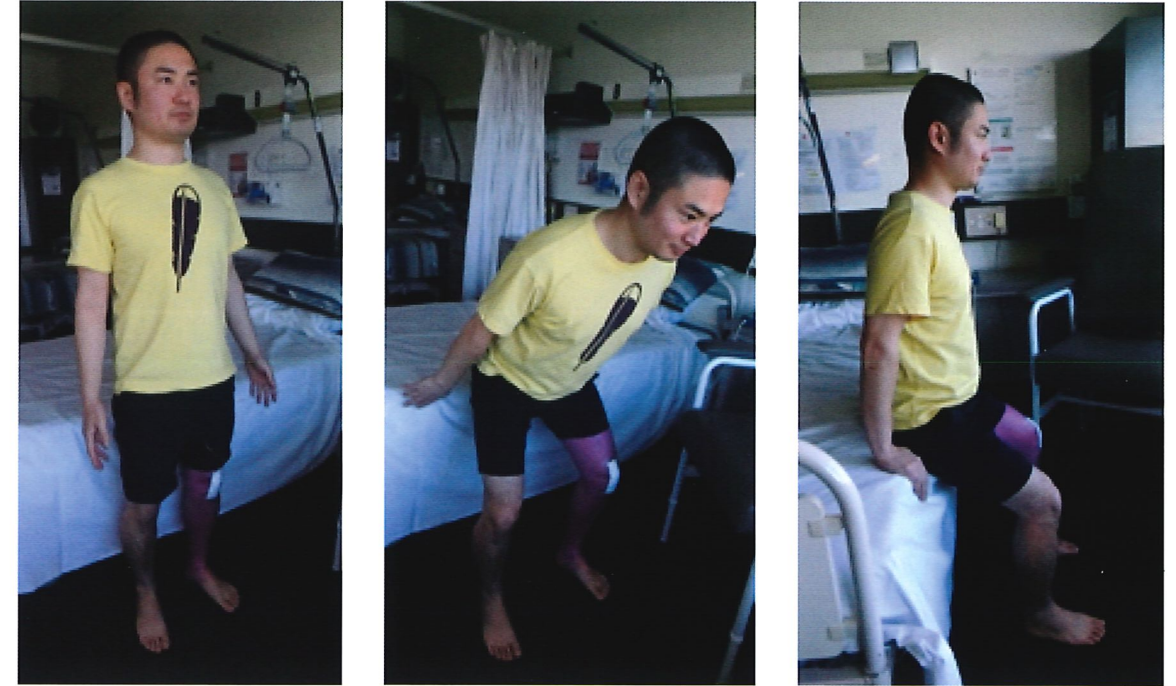
If you normally take blood thinning medication your doctor will advise when these are to be recommenced.

Most other medications that you normally take will be given to you during your hospital stay by the nursing staff.



Please bring your regular medications to the hospital in their original containers/boxes or webster pack.

Sitting Down

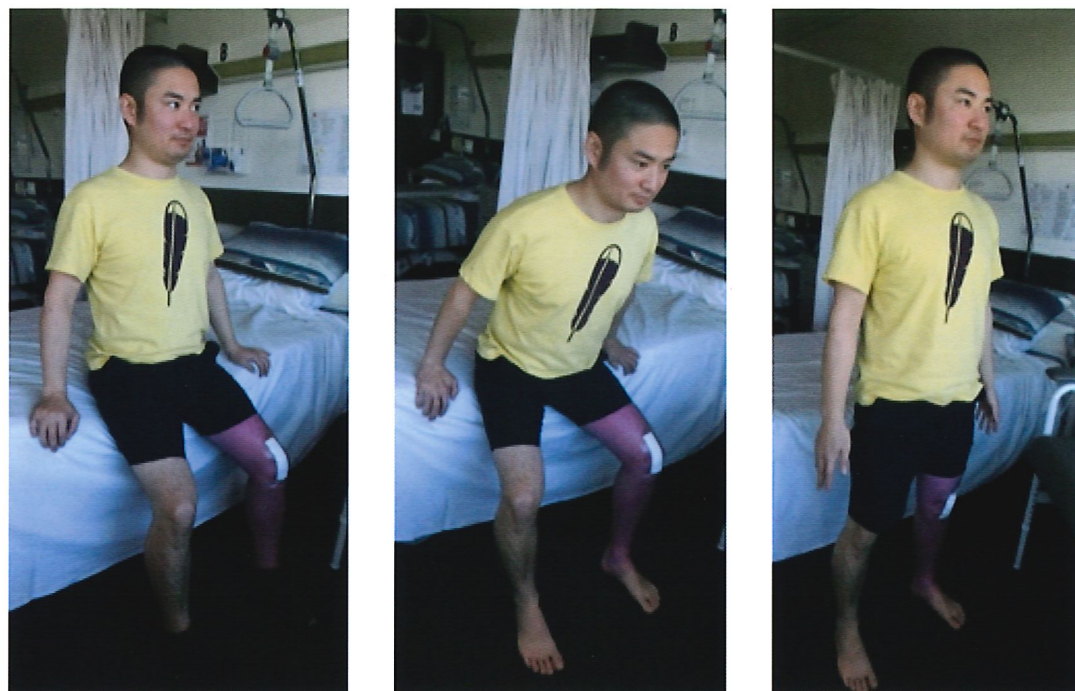


1. Feel the bed/chair with back of your legs.
2. Place your walking aids in the right position and place your hands on bed/chair.
 - Walker: In front of you. Place hands on bed/chair one at a time.
 - Crutches: Push the crutches forward so the arm support rings are around your wrist.
3. Keep your left and right foot on the same line and slowly sit down.

Mobility Instructions (Moving Around)

Standing up

Make sure your bed or chair is not too low for you (Hips must be higher than knees).



1. Place your walking aids in the correct position and place your hands on bed/chair.

- *Walker:* In front of you. Hands are kept on the bed/chair for pushing up.
- *Crutches:* Arm support rings around your wrists while your hands are resting on the bed/chair. Hands are free to push up to stand up.

2. Sit at the edge of the bed and feet are firmly placed on the floor.

3. Slide feet back so the heels are behind the knees.

4. Lean forward and push up with your hands.

5. Maintain your balance and stand up tall.

(You may experience light-headedness and/or nausea. Do not start walking until it this settles).

Avoid standing still for a long period of time.

Do not stand on one leg only. Keep your weight even on each foot with legs slightly apart.

Do not stress the new joint by doing things like jumping and landing on the operated leg even if it is a small height.

Bladder & Bowel Care

During surgery you may have a catheter placed into your bladder to drain urine into a bag. This allows for close monitoring of your 'fluid balance' following surgery. The catheter will usually remain in place for approximately 24hrs. During this time and after removal it is very important to drink plenty of fluids, especially water. As you recover and your mobility increases you will be able to go to the toilet.

Due to surgery, fasting, some pain medications and decreased movement, your bowel movements may change. You should drink plenty of water, eat fresh fruit and discuss with your nurse as you may take a laxative if required as this will help restore bowel habits back to your normal. If you normally take laxative medication at home, please let your nurse know as this should be continued.

Wound Care

A drain may be placed near the surgical wound following surgery and the wound will be covered with padding for the first 24 hours. The dressing and drain are usually removed the following day and replaced with a flexible, waterproof dressing to protect the wound.

Swelling of the operated leg and foot is common and it may take over 6 weeks for this swelling to settle.

On occasion the knee incisions may ooze a watery yellow fluid for a few days and your dressing may need to be changed more often.

The nurses will discuss with your doctor if they have any concerns about your wound healing.

If you have stitches or clips that require removal this is usually attended to 14 days after surgery. An appointment will be made for your with our nurses and you will be advised of this prior to discharge.

Physiotherapy

Physiotherapists will be involved in all parts of your rehabilitation before, during and after the hospital stay. We will guide you throughout the operation journey.

Phase 1: Preparation for your surgery.

We recommend all clients undertake pre-operative rehabilitation to maximise the odds of a successful, speedy recovery from surgery. We recommend 6 weeks or longer for the preparation period. Generally, the longer the preparation period, the easier it will be to reach your maximum preparation potential. Circumstances can vary though and you might have less than 6 weeks to carry out exercises but don't worry. Even a couple of weeks of guided preparation can help you to improve and be better prepared for your surgery.

Your physiotherapist can provide you with a personalised exercise programme as well as on-going support for adjusting exercises that best suit you.

Phase 2: In the hospital.

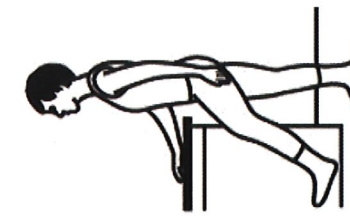
The 'Early Mobilisation Protocol' will help you to minimise the risk of developing complications after your surgery. It is normal to experience some pain in the operated site but it is important to alternate regular physical activities and rest, in order to prevent any complications.

Regular walking is particularly important because the muscles on the affected side are often weak and tight as pain and stiffness in the arthritic hip joint limit normal movement.

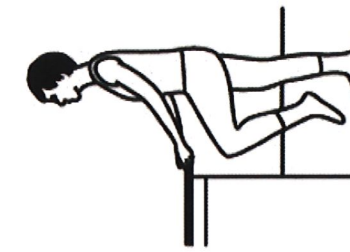
Exercises should be done with both legs. Your physiotherapist will show and explain the correct techniques to perform the exercises. Your physiotherapist will guide you through the rehabilitation process to optimise your recovery speed.



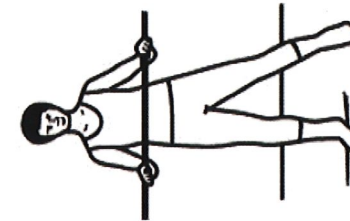
10 times each exercise



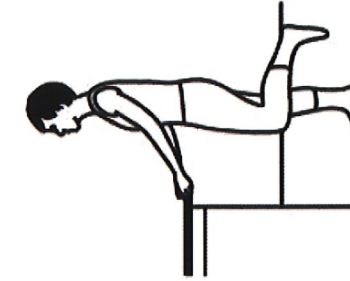
1. Stand, holding on to a secure object. Lift one of your legs forward off the ground.



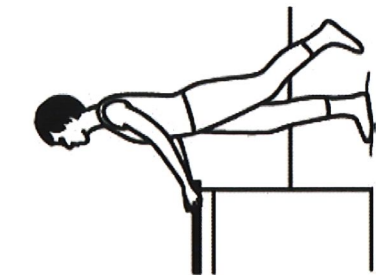
2. Bring your knee up toward the ceiling, bending your knee.



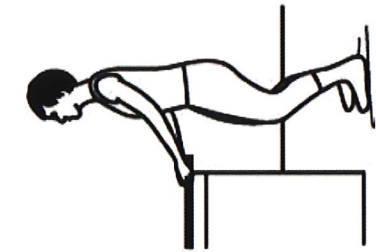
3. Lift your leg out to the side.



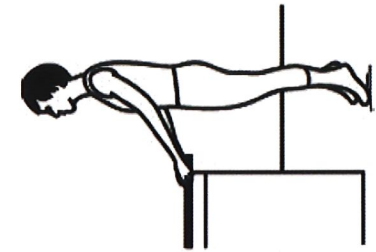
4. Bend your knee, bringing your heel toward your buttocks.



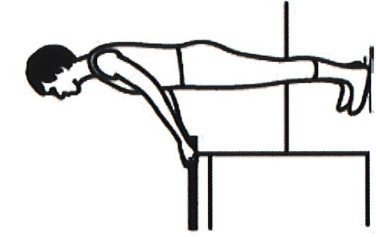
5. Slowly lift your leg backward.



6. Bend your knees slightly.


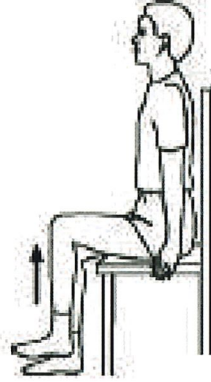
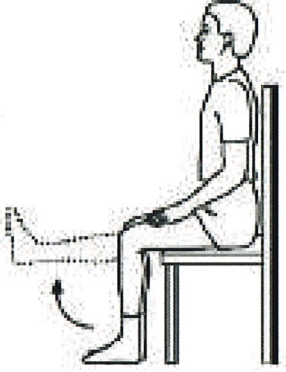
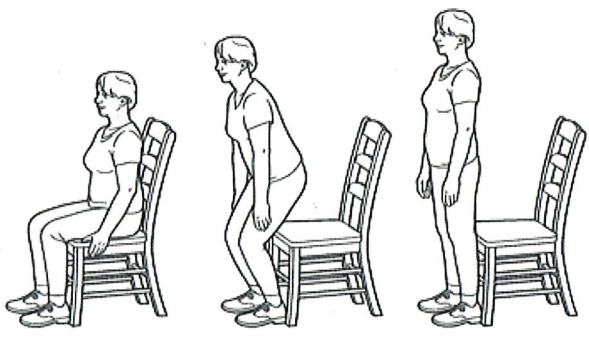


7. Raise up onto the balls of your feet.



8. Raise your forefeet off the floor.

Chair Exercises

<p>Ankle Pump</p> <p>Lift your toes off the floor then down.</p> <p>Then point your toes to the floor and lift your heels.</p> <p>Repeat 20 times.</p>	
<p>Seated Marching</p> <p>Lift right knee to hip height and down.</p> <p>Then lift left knee to hip height and down.</p> <p>Repeat 20 times.</p>	
<p>Knee Bend & Straight</p> <p>Bend your knee as far as you can.</p> <p>Then straighten it as far as you can.</p> <p>Repeat 10 times.</p>	
<p>Sit to Stand</p> <p>Holding onto bed/armrest, slide bottom to the edge of the bed/chair.</p> <p>Slide heels back until they are behind your knees. Lean forward and slowly stand up.</p> <p>Then slowly sit down.</p> <p>Repeat 10 times.</p>	

Day of the surgery

- Start bed exercises within 2 hours after your arrival to the HDU.
- Start mobilisation (standing and moving around) under nurse's instruction.

Day 1 post surgery

- Progress exercises to chair exercises.
- Start regular mobilisation
- Start walking re-education and practice.

Day 2 post surgery and onwards

- Continue regular mobilisation.
- Progress exercises to standing exercises as able.
- Practice going up and down stairs if appropriate.

Phase 3: Follow-up appointments


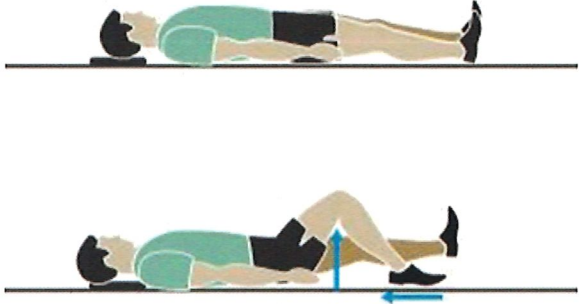
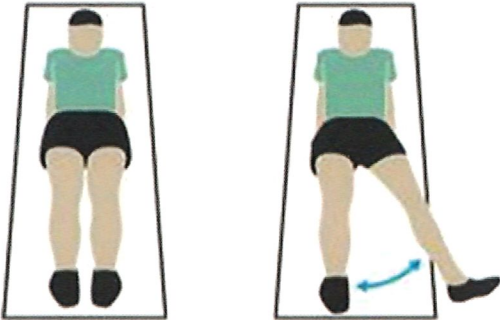
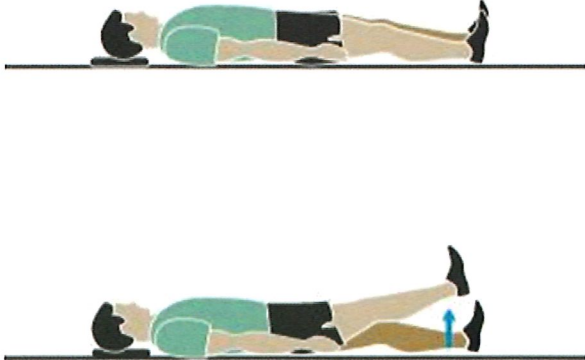
2 weeks post operation and onwards.

- Physiotherapist to review your progress and increase/change your exercises depending on your progress
- Physiotherapist will monitor your walking and keep you on the right track during the course of rehabilitation: Usually for 4 to 8 weeks.
- Self manage the rehabilitation programme once your exercise programme is well established by your physiotherapist.

Exercises

Bed Exercises

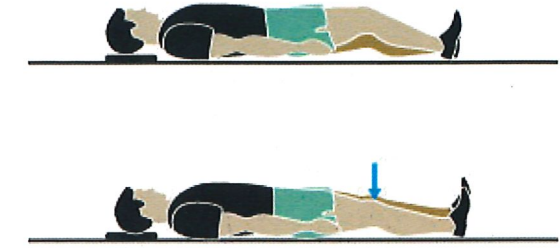
- Deep breathing: Take 10 deep breaths with slow inhale and exhale. Have a 3 second pause between inhale and exhale to fully open up your lungs.
- Leg exercises: You will complete the exercises for both legs every hour or so. See the diagram below.

<p>Ankle Pump Move toes up and down. Repeat 10 times.</p>	
<p>Heel Slide: Up & Down Slide heel towards your bottom as far as you can. Repeat 10 times.</p>	
<p>Heel Slide: Side to Side Slide heel to the side and bring it back to the middle. Repeat 10 times.</p>	
<p>Straight Leg Raise Keep your legs straight. Slowly lift foot off the bed and bring it down. Repeat 10 times.</p>	

Leg Squeeze

Point toes to knee and push the back of the knee down to the bed. Repeat 10 times.

(You should feel the muscle in the front of the thigh working)



Bridging

Bend both of your knees.

Lift your bottom off the bed and straighten your body.
Repeat 10 times.

