



P A T I E N T I N F O R M A T I O N

Knee Arthroplasty

Total knee Arthroplasty

Hemi Knee Arthroplasty

***Please pack this booklet with your belongings
that you will bring to hospital. You will need
to refer to this booklet after surgery.***

THE OTTAWA HOSPITAL

Disclaimer

This is general information developed by The Ottawa Hospital. It is not intended to replace the advice of a qualified healthcare provider. Please consult your healthcare provider who will be able to determine the appropriateness of the information for your specific situation.

Table of Contents

Introduction	1
Your Condition and Your Surgery	2
Total Knee Arthroplasty	2
Hemi Knee Arthroplasty	3
Clinical Pathway – Total Knee Arthroplasty and Hemi Knee Arthroplasty	4, 5
Preparing For Your Surgery	6
Preparing your home	6
Special equipment needed	7
Other self-care aids that you may need	8
Walking aids	8
Exercises before surgery	8
The Pre-Admission Unit Visit	10
The Day of Surgery – Before the Surgery (Pre-Op)	10
Your Care in Hospital – After Surgery	10
Assessments	10
Intravenous	11
Oxygen	11
Pain management after surgery	11
Post-operative exercises	11
Pillow Talk – How to position the pillows to protect my new hip	12
Walking After Your Surgery	13

Preparing For Discharge.	13
After Discharge.	14
Self-care	14
Showering.	14
Staples	14
Walking.	14
Post-operation exercises.	14
Driving	14
Going back to work.	14
Anticoagulants or blood thinners	15
Sexual activity	15
Call your orthopaedic surgeon or family physician if any of the following occurs	15
Contact Information.	15



Introduction

*W*elcome to The Ottawa Hospital.

This booklet was prepared for you by the Orthopaedic multidisciplinary team to help you understand:

- Your condition and your surgery
- How you can help yourself
- Your care in hospital
- Your needs, care and resources after discharge.

Your health-care team has made a plan in advance for certain parts of your care. This plan is shown in the “clinical pathway” on page(s) 6 and 7. The clinical pathway describes some of the usual care for people with your condition. This plan will be adapted for your specific needs. You can expect to stay in hospital for 1 to 2 days after your surgery.

Please:

- Read the booklet carefully
- Share it with your family
- Ask questions if there is anything you don't understand
- Pack the booklet with your belongings and bring it with you when you are admitted to hospital.

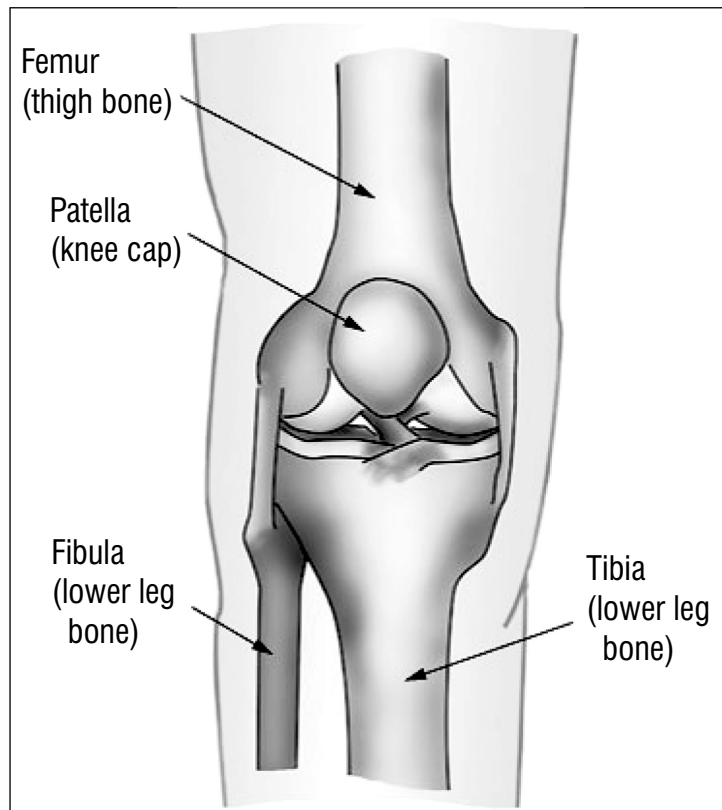


Your Condition and Your Surgery

Total Knee Arthroplasty

The knee is the largest joint in the body. It unites two long bones, the femur and the tibia. The thighbone (femur) has a rounded end that fits into the shinbone (tibia).

This joint allows us to stand, sit and walk. Both ends of these bones are covered with cartilage (a smooth, elastic type of tissue) that protects and cushions the surfaces of these bones. The knee cap (patella) is a small bone that is attached in front by the thigh muscles. Muscles and ligaments support and assist with the movements of the knee. The hinge-like motion depends upon joint fluid and healthy cartilage.

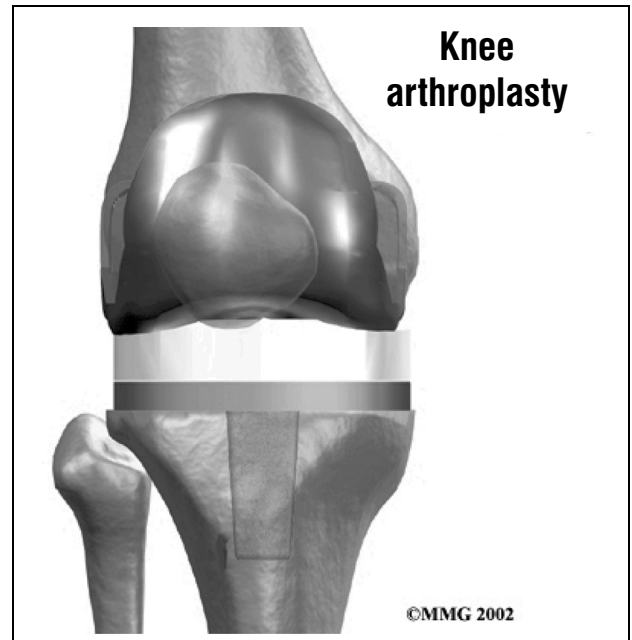
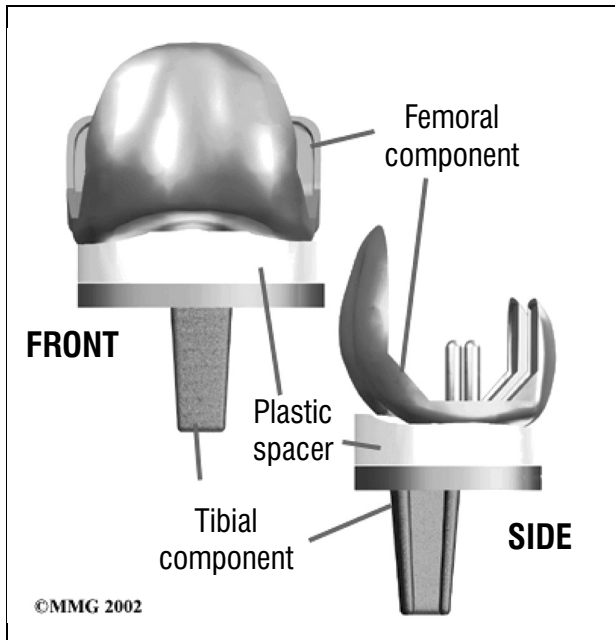


Knee pain occurs where there is ligament or cartilage damage. Injuries, deformities, degenerative conditions and the wear and tear of normal aging may develop into Osteoarthritis (OA). The bones may begin to rub against each other, the muscles weaken and the joint becomes stiff and swollen, resulting in pain and/or loss of normal knee movement.

When other treatments such as physiotherapy, weight loss and medication, no longer work and you cannot carry on with normal activities, your Physician may recommend a total knee replacement (sometimes called Arthroplasty).

There are three parts to a knee replacement:

- 1) A metal part that fits over the thighbone (femur).
- 2) A plastic piece that fits into a metal tray that is attached to the shinbone (tibia).
- 3) A small button on the under-surface of the kneecap (patella).

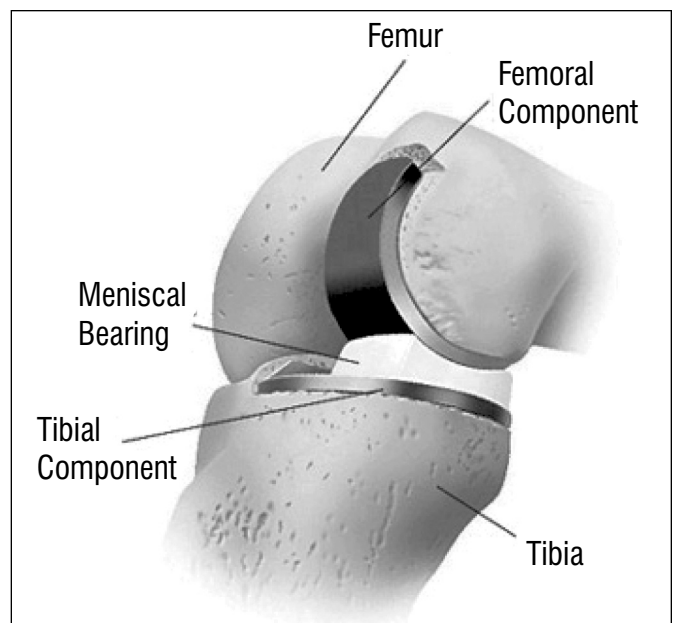


Hemi Knee Arthroplasty

A hemi knee replacement is an operation that replaces only part of the knee joint.

Unlike a total knee replacement, during the oxford knee replacement procedure only the diseased portion of the knee joint is replaced.

A hemi knee arthroplasty is recommended when only half of your knee joint is affected by disease such as osteoarthritis.



The following 2 pages show the clinical pathway for your condition. There is more detailed information after the clinical pathway.

Clinical Pathway – Total Knee Arthroplasty and Hemi Knee Arthroplasty			
	Pre-Admission Unit (PAU)	Admission	Post-Operative (PACU and Unit)
Tests	<ul style="list-style-type: none"> • Lab tests • ECG as necessary • X-rays if needed 	<ul style="list-style-type: none"> • Lab tests if needed 	<ul style="list-style-type: none"> • Lab tests if needed
Consults			<ul style="list-style-type: none"> • Physiotherapy/Occupational Therapy
Treatments		<ul style="list-style-type: none"> • Intravenous (IV) 	<ul style="list-style-type: none"> • IV • Dressing on knee • Oxygen as needed
Medications		<ul style="list-style-type: none"> • Antibiotic • Your specific medications 	<ul style="list-style-type: none"> • Pain medication • Antibiotic • Blood thinner • Your specific medications
Activity			<ul style="list-style-type: none"> • Pillow between knees as needed • Up in chair × 1 • Ambulate if able • Bed exercises: <ul style="list-style-type: none"> – Deep breathing and coughing – Ankle pumping
Nutrition		<ul style="list-style-type: none"> • No solid food after midnight • May drink clear fluids up to 2 hours before admission 	<ul style="list-style-type: none"> • Sips of water and progress to diet as ordered
Elimination			<ul style="list-style-type: none"> • Urinary catheterization as needed
Patient Teaching/Discharge Planning	<ul style="list-style-type: none"> • Understands post-op plan as per patient education booklet • Understands usual length of stay (1-2 days) depending on type of surgery • Discharge plan in place (10 a.m. discharge) 	<ul style="list-style-type: none"> • Review pre-op instructions • Understands expected events of the day 	<ul style="list-style-type: none"> • Breathing exercises • Ankle pumping • Pain management • Proper pillow positioning • Weight bearing status • Bowel management • Blood clot symptoms • Self-injection of blood thinner if ordered • Possible discharge home tomorrow by 10 a.m.

Clinical Pathway – Total Knee Arthroplasty and Hemi Knee Arthroplasty			
	Post-op Day 1	Post-op Day 2 Discharge Day	Post-op Day 3 (if needed)
Tests	<ul style="list-style-type: none"> • Lab tests • X-ray 		
Consults	<ul style="list-style-type: none"> • Confirm discharge plans • Social Work if problems with discharge plans 	<ul style="list-style-type: none"> • Confirm discharge plans • Appropriate consults initiated as needed 	<ul style="list-style-type: none"> • Confirm discharge plans
Treatments	<ul style="list-style-type: none"> • IV removed if eating and drinking well • Dressing: bulky dressing removed, smaller dressing applied and changed as needed • Oxygen as needed 	<ul style="list-style-type: none"> • Dressing changed only if needed 	<ul style="list-style-type: none"> • Dressing changed only if needed
Medications	<ul style="list-style-type: none"> • Pain medication • Blood thinner • Your specific medications 	<ul style="list-style-type: none"> • Pain medication • Blood thinner • Your specific medications 	<ul style="list-style-type: none"> • Pain medication • Blood thinner • Your specific medications
Activity	<ul style="list-style-type: none"> • Exercise program <ul style="list-style-type: none"> – Up in chair ×3 – Ambulate in hall – Up to bathroom • Deep breathing and coughing • Ankle pumping • Gait training in stairs if necessary 	<ul style="list-style-type: none"> • Exercise program <ul style="list-style-type: none"> – Up in chair ×3 – Ambulate in hall – Up to bathroom • Deep breathing and coughing • Ankle pumping • Gait training in stairs if necessary 	<ul style="list-style-type: none"> • Exercise program <ul style="list-style-type: none"> – Up in chair ×3 – Ambulate in hall – Up to bathroom • Deep breathing and coughing • Ankle pumping • Gait training in stairs if necessary
Nutrition	<ul style="list-style-type: none"> • Diet as ordered 	<ul style="list-style-type: none"> • Diet as ordered 	<ul style="list-style-type: none"> • Diet as ordered
Elimination	<ul style="list-style-type: none"> • Voiding well • Bowel movement 	<ul style="list-style-type: none"> • Voiding well • Bowel movement 	<ul style="list-style-type: none"> • Voiding well • Bowel movement
Patient Teaching/ Discharge Planning	<ul style="list-style-type: none"> • Exercise program • Breathing exercises • Ankle pumping • Pain management • Proper pillow positioning • Weight bearing status • Bowel management • Blood clot symptoms • Discharge at 10 a.m. if criteria not met, discharge tomorrow 	<ul style="list-style-type: none"> • Exercise program • Breathing exercises • Ankle pumping • Pain management • Proper pillow positioning • Weight bearing status • Bowel management • Blood clot symptoms • Discharge at 10 a.m. 	<ul style="list-style-type: none"> • Exercise program • Breathing exercises • Ankle pumping • Pain management • Proper pillow positioning • Weight bearing status • Bowel management • Blood clot symptoms • Discharge at 10 a.m.



Preparing For Your Surgery

Preparing your home

It is important to set up your home **BEFORE** joint surgery. Here are some suggestions to prepare your home. This will allow you to move easily around your home with a walker or crutches. It will also help reduce the risk of falls.

- Free your hallway of clutter and tripping hazards (e.g. scatter rugs, footstools, etc.).
- Add non-slip surfaces to outside stairs and walkways.
- Install stair railings or make sure the existing ones are secure.
- Set up a firm chair with armrests (not a rocking chair).
- Use a high-density foam cushion or bed blocks to increase chair height.
- Ensure your bed, chair, toilet, bath chair and other sitting surfaces are at the correct height (2 inches higher than the back of your knee).
- Ensure good lighting in hallways and other well used areas. Add nightlights as needed.
- Arrange for extra help with household tasks if needed (i.e. vacuuming, laundry, groceries).
- Put frequently used items in your kitchen and bathroom at waist-to-shoulder height.
- Consider moving items in the lower parts of the fridge/freezer to a higher shelf.
- Stock your freezer/pantry with healthy foods and snacks. Consider hiring a private food/meal delivery services if needed.
- Keep ice packs in your freezer for possible joint swelling after surgery. You can also use a bag of frozen peas.
- Have a thermometer at home to check your temperature in case you need it.

Special equipment needed

Make arrangements to have the following equipment in your home **BEFORE** your surgery.

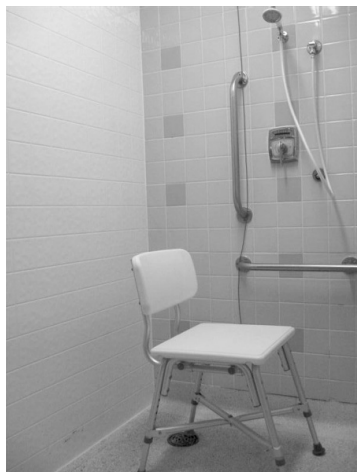
- Raised toilet seat with arms **OR** over-the-toilet commode with adjustable height legs.



- Tub transfer bench (for tub/shower combination) **OR** clamp on grab bar.

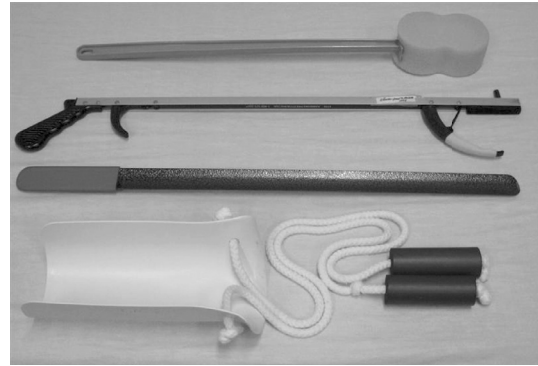


- Shower chair with adjustable height legs (for walk-in shower) **OR** shower stool.



Other self-care aids that you may need

- Long-handled sponge
- Long-handled reacher
- Long-handled shoe horn
- Sock aid



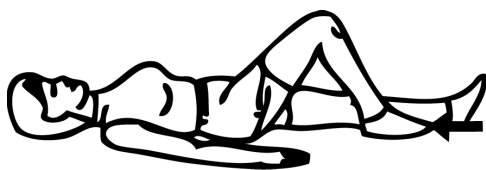
Walking aids

- Two-wheeled walker or crutches

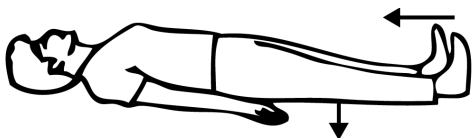


Exercises before surgery

To help your recovery after surgery we are suggesting that you start these exercises prior to surgery. Try to perform each exercise three times a day. If excessive swelling and/or pain occurs, reduce the number of repetitions. Follow this exercise program unless told otherwise by your doctor.



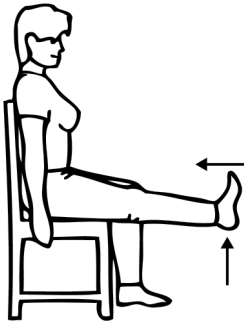
- Lying on your back.
- Bend the leg up by sliding the heel back towards your buttocks.
- Repeat 5 to 10 times.



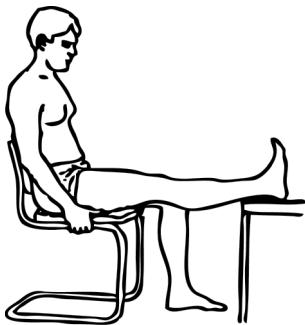
- Lying on your back with legs straight.
- Bend your ankle towards you and push your knee down firmly against the bed. Hold for 5 seconds. Relax.
- Repeat 5 to 10 times.



- Lying on your back.
- Tighten your thigh muscle and straighten your knee. Pull the foot towards you and lift the entire leg off the bed (about 35 cm). Hold for 5 seconds.
- The opposite leg is bent throughout the exercise.
- Repeat 5 to 10 times.



- Sit on a chair or at the edge of the bed.
- Pull your toes up, tighten your thigh muscle and straighten your leg. Hold for 5 seconds and slowly relax your leg.
- Repeat 5 to 10 times.



- Sitting upright on a chair, with the leg to be exercised supported on a chair as shown.
- Let your knee straighten in this position. Hold for 30 to 60 seconds.
- Repeat 5 times.

You can begin doing these exercises today and do them until the day of your surgery.



The Pre-Admission Unit Visit

You will be called by the hospital for a pre-admission assessment and to arrange for any tests you may need before your surgery.

Important: Bring all your medications in their original labelled bottles to this appointment or have them readily available if this appointment is completed by phone. Please remember you are not to take any of your home medications while in hospital, unless indicated by the pharmacists, doctor, or nurse.



The Day of Surgery – Before the Surgery (Pre-Op)

Please follow the pre-op instructions provided by the nurse during your pre-admission visit. Please feel free to bring any of your personal hygiene (i.e. toothbrush/paste, deodorant, comb, razor) items from home but remember storage space is limited.



Your Care in Hospital – After Surgery

After your surgery you will awaken in the Post-Anesthetic Care Unit (PACU) where you will stay until your condition is stable. When you are stable you will be transferred to your room.

Assessments

The nurse will check you often to ensure that you are comfortable and progressing well. Your temperature, heart rate, blood pressure, oxygen level and dressing are checked. You will have a large bulky dressing over your knee often referred to as a Jones dressing. The nurse will check the pulses on your foot. You will be asked to wiggle your toes and move your foot often and the nurse will check if you have any change in sensation in your foot.

Intravenous

You will have an intravenous (IV) to replace your fluids until you are able to drink and eat well. Do not pull on the IV tubing.

Oxygen

Extra oxygen is sometimes given through a mask placed over your nose and mouth or by small tubes placed into your nostrils. A small clip on your finger measures the amount of oxygen in your blood. This is called pulse oximetry. The measurement is used to determine if you are getting enough oxygen. The nurses will increase, or decrease the amount of oxygen based on their assessment. The oxygen will be discontinued when appropriate.

Pain management after surgery

Your comfort is our concern. It is important that you have effective pain relief. Pain is personal. The amount of pain you feel may not be the same as others feel, even for those who have had the same surgery. Your pain should be controlled enough so that you can rest comfortably. Pain should not prevent you from deep breathing, coughing, turning, getting out of bed and walking. Both drug and non-drug treatments can be successful in controlling pain.

The most common pain control treatments for after surgery are described in the *Pain Management after Surgery* booklet. You, your doctors and your nurses will decide which pain treatments are right for you. Please read the booklet before your surgery and bring it to the hospital on the day of your surgery.

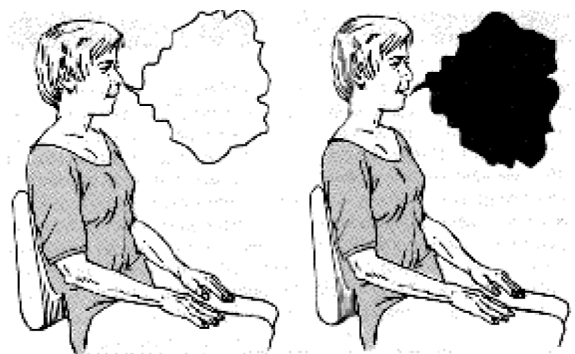
Post-operative exercises

Deep breathing and coughing

After surgery we tend to take smaller breaths. This can be because of pain or anesthesia given during our surgery, and because we don't move around as much after surgery. Doing deep-breathing and coughing exercises after surgery will help keep your lungs healthy.

Deep-breathing exercises work best when you are sitting up in a chair or on the side of the bed. Follow these instructions:

- Take a deep breath in through your nose. Hold for five seconds.
- Breathe out through your mouth.
- Repeat this exercise ten times each hour while you are awake and until your activity level increases.

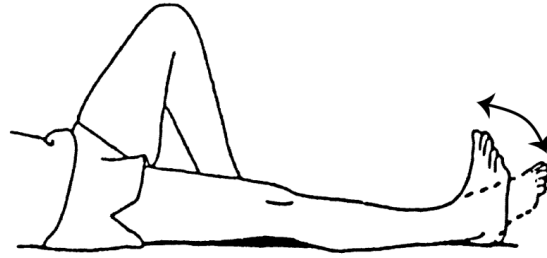


Coughing exercises help to loosen any secretion that may be in your lungs and should be done after your first five deep breaths. To produce an effective cough:

- Take a deep breath and cough.

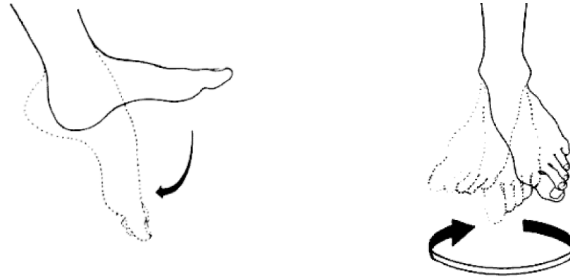
Calf-pumping exercises

- Point your toes (as if you were pressing on a gas pedal) and point your toes towards your chin. Repeat ten times.



Ankle exercises

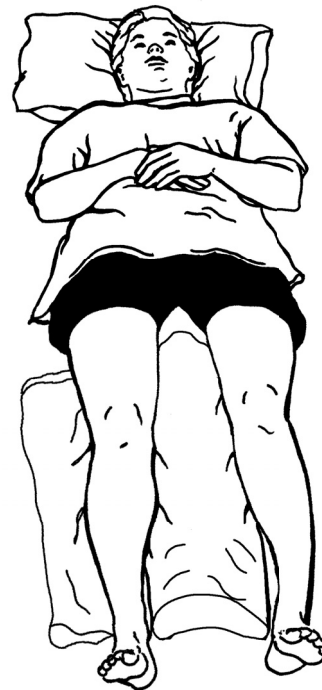
- Ankle exercises help prevent blood clots by increasing blood circulation in your legs. Do these ten times each hour, while you are awake and until your activity level increases.
- Make circles with your feet.



Pillow Talk – How to position the pillows to protect my new hip

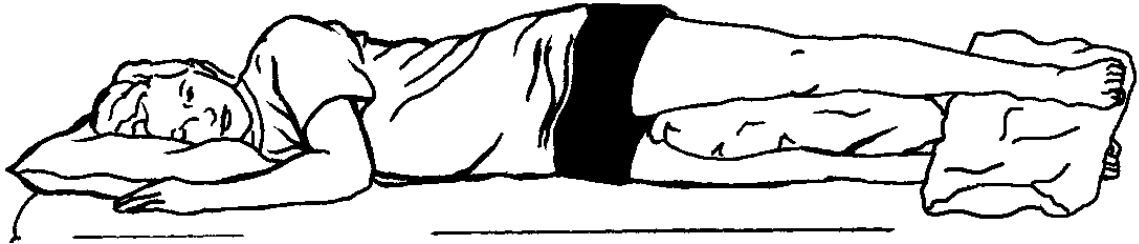
Lying on back

- One thin pillow lengthwise under the operated leg for comfort and to position the heel off the bed.
- Avoid knee flexion.



Lying on side

- 1 to 2 pillows lengthwise between the legs.
- One pillow under the ankle/foot.
- Pillows behind the back.
- Avoid lying on the operated side.



Walking After Your Surgery

Physiotherapy and your nurses will teach and inform you what movement restrictions you will need to follow to protect your knee. If you have any questions please be sure ask your physiotherapist or nurse before you are discharged home. It is important to have good walking shoes that have non slip sole, and that are easy to put on.

Please see the clinical pathway for day-to-day progress information while in hospital.



Preparing For Discharge

Before you go home, make sure you have:

- A prescription for pain medication.
- A clinic appointment to see your orthopedic surgeon.
- A staple remover (if applicable) and a letter for your Family Physician.
- A prescription for equipment and physiotherapy if applicable.



After Discharge

Self-care

- Lie down several times a day with your operated leg slightly elevated. This will help decrease swelling.
- Avoid moving too quickly. Let people know that it will take longer to answer the phone or door.
- Prevent constipation by drinking plenty of fluids, add fiber to your diet, remain active and avoid the overuse of laxatives.

Showering

You may shower after your surgery. Follow the instructions given to you by your surgeon or the nurse who has discharged you. Do not take a bath or get in a hot tub until your staples have been removed and your incision is completely healed.

Staples

Staples are removed 10 to 14 days after surgery. If you go home, the staples will be removed at your surgeon or family physician's office. If you go to rehabilitation or extended care facility, they will remove the staples. If you receive home health care, they will remove the staples.

Walking

You will be given specific instructions about your weight bearing status after surgery.

Post-operation exercises

Continue to practice exercises as instructed by the physiotherapist. Discuss this with your surgeon and physiotherapist.

Driving

Usually you will be able to drive within 2 to 4 weeks. Check with your surgeon as well as your insurance company.

Going back to work

This depends on the type of work that you do. Your surgeon will advise you about when to return to work and any restrictions to follow once you do return to work.

Anticoagulants or blood thinners

Discuss this with your surgeon and the nurse on the before discharge. It is very important to take your anticoagulant therapy for the length of time prescribed.

Sexual activity

Patients may resume sexual activity when comfortable and as long as you adhere to any knee precautions you may have.

Call your orthopaedic surgeon or family physician if any of the following occurs

- Increased pain in calf, thigh or leg
- Your leg appears shorter than the non-operated side
- Swelling, tenderness or redness in either leg
- Temperature above 38° C taken at least 30 minutes after eating or drinking
- Drainage, redness, swelling, a foul odour or opening of incision
- Increased difficulty with walking
- Shortness of breath
- Chest pain



Contact Information

My surgeon's name: _____

My surgeon's phone number: _____

Orthopaedic Clinic:

Civic Campus: 613-737-5555, ext. 15136

General Campus: 613-737-8370

Plaster Room:

Civic Campus: 613-737-5555, ext. 14094

General Campus: 613-737-8400

Notes

This image shows a full page of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for handwriting practice or general note-taking. There are no margins, text, or other markings on the page.