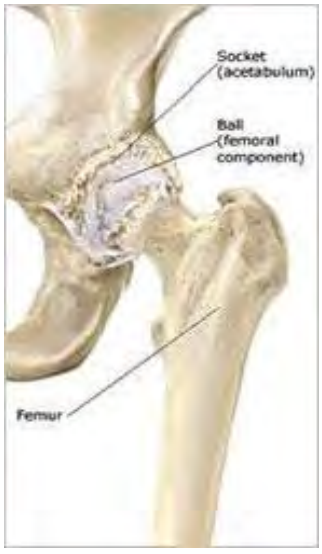
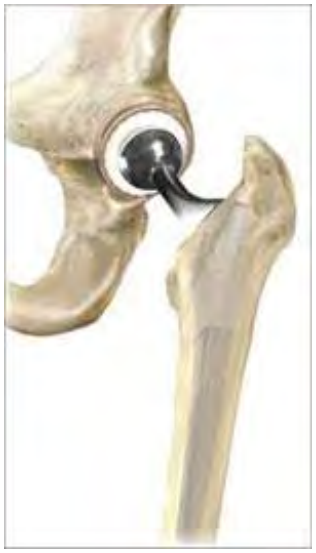
St. Thomas-Elgin General Hospital

Working Together for Your Good Health

PATIENT HANDBOOK FOR HIP REPLACEMENT SURGERY





INTRODUCTION

This booklet has been prepared for patients who are about to have a Total Hip Replacement. This booklet will give you some of the necessary information you will need in order to have a successful surgical experience. This booklet will also be a useful reminder when you leave the hospital.

Please keep this booklet. Feel free to share it with your family, close friends or caregivers. If you have any questions or concerns, please ask anyone on the team for help.

Read this booklet prior to your surgery and **write down** any questions you have and bring them with you.

Bring this handbook with you when you come to the hospital for surgery.

Questions to ask:

Acknowledgements: Mike Lalonde BScPT, Stephanie Vander Pol MScPT

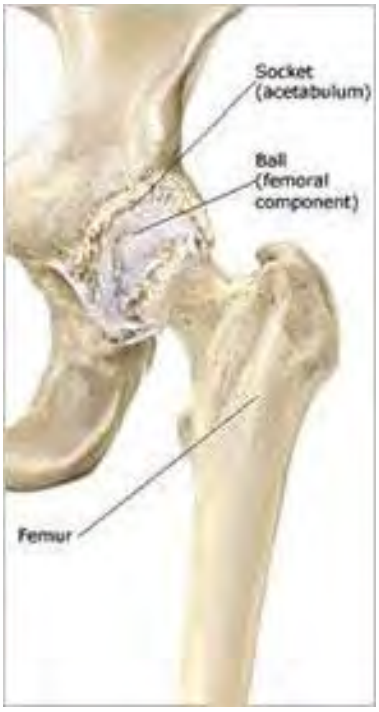
INSIDE THIS BOOKLET

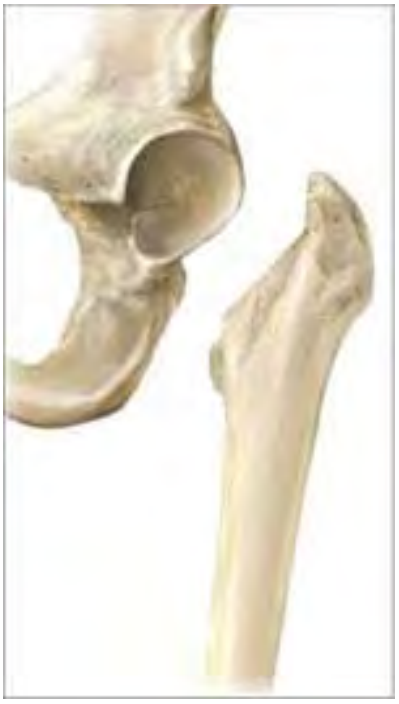
UNDERSTANDING TOTAL HIP REPLACEMENT

(Total Hip Arthroplasty)

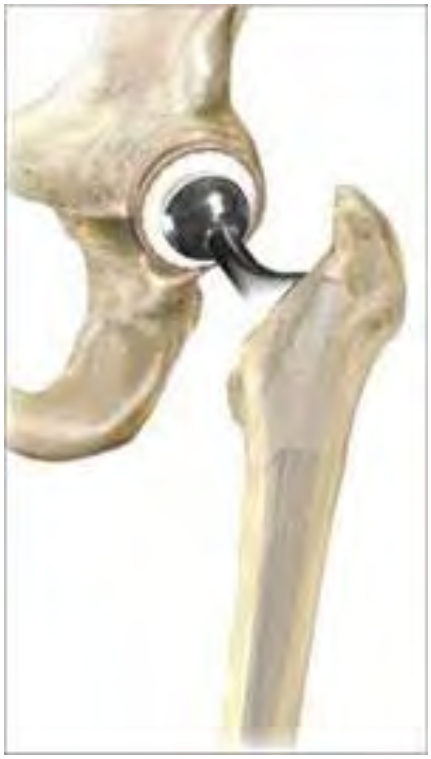
The hip joint is a “ball and socket” joint, which allows movement in all directions: forwards, backwards, sideways and rotation. The end of the thigh bone (femur) is ball shaped and fits into the socket (acetabulum) of the pelvis. Ligaments and muscles hold the joint together. The joint is lubricated with synovial fluid, which comes from the lining of the joint. Cartilage, a smooth coating over the bones, allows the hip bones to move easily without pain.

Degeneration of the cartilage or bone and weakening of the muscles, often due to arthritis, can cause severe pain and stiffness in the hip joint. Hip replacement removes damaged bone and cartilage and provides smooth working surfaces. The primary goal of a hip replacement is to decrease pain. It can also be done to improve function of the hip and make the hip more stable or reliable.





During surgery, skin and muscles are cut and the hip joint is opened. The ball of the femur bone is removed and replaced with a new ball and stem that goes down into the centre of the femur. Damaged cartilage and bone are removed from the socket and a metal shell with a liner is inserted. The replacement pieces can be made of metal, plastic, or ceramic. The surgeon can discuss with you which type will be most appropriate. Special bone cement may also be used. Once the new hip joint is in place, the muscles and skin are stitched together and the incision is closed with medical glue or staples.



Questions:

POSSIBLE COMPLICATIONS

Anesthesia
Although problems with anesthetics are rare today, some still exist. The rate of unexpected death is about 1 in 200,000. Your anesthesiologist and surgeon will talk to you about any concerns.

Medical Health Concerns
Heart disease, diabetes, chronic lung disease, smoking, anemia, rheumatoid arthritis, obesity, and other medical problems may slow your recovery.

Nerve or Blood Vessel Damage
Nerve or blood vessel damage is rare. The incidence of damage to the major nerves of the hip (sciatic and femoral) ranges from 1 to 3% and damage to the arteries around the hip range from 0.1 to 0.2%. In most instances, these injuries occur during major revision surgery or surgery done to correct gross deformities. If nerve damage does occur, it may leave numbness, weakness, or paralysis in the foot. A brace or sometimes additional surgery may be required.

Blood Clots (Deep Vein Thrombosis or Pulmonary Embolus)
Harmless blood clots in the veins of the legs can occur in as many as 40% of knee or hip replacement surgery. It is rare for them to travel to the lungs (less than 1%); however, if this occurs it could result in death. Likewise, material from inside of the femur can on rare occasions travel to the lung. Blood thinning medication is often used after surgery to help prevent blood clots.

Pain
Pain following hip surgery varies with each person. It is important to keep your pain under control in order to be able to do your therapy. It is better to treat your pain when it is mild rather than waiting for it to become severe.

Swelling (Edema)
The normal healing process may cause swelling in your leg. This may last several days or weeks. It will often improve if you ELEVATE your leg. If it becomes very painful or continues to increase despite elevation, you should call the surgeon's office.

Infection
The infection rate is less than 2%. If infection occurs, the artificial pieces may need to be removed and replaced after the infection has been controlled.

Late Infection
You must always be careful to avoid infections (sinus, chest, dental, skin, etc.) and get treatment quickly. Infection can settle into your new hip with very serious results. We recommend that your dentist follow the **Canadian Dental Association (CDA)** guidelines for preventative antibiotics with dental work.

Blood Loss
You may lose large amounts of blood during or after the surgery. This is rare, but you may need a blood transfusion. There is a slight risk that you can develop an illness from a transfusion. It is possible to donate your OWN blood well before the operation. We cannot accept blood from family or friends for your personal use. Iron supplements (pills) are often used to help rebuild your blood.

Confusion
Short-term confusion following the surgery may be due to medications, anesthesia, or medical conditions. If usually resolves after a day or two. Regular alcohol or drug use before surgery can make post-operative confusion worse.

Urinary Problems
You may have trouble urinating (passing your water). You may need a catheter (flexible tube) to drain your bladder. If you feel pain or burning when urinating, tell your nurse. This may be a sign of infection.

Bruising or Bleeding
Sometimes blood can collect in the wound after surgery. Your body will eventually reabsorb this. Blood from your incision or dark bruising may occur. The nurses will teach you how to monitor this.

Slow Wound Healing
When the skin, tissues, muscles, and bone are cut during surgery, sometimes healing is slow. This may give some short-term local pain and swelling. With time, healing most often occurs.

Leg Length Difference
Your damaged hip may leave your leg slightly shorter than your other leg. During the operation, the surgeon attempts to make leg lengths the same. It is very important that your artificial hip is stable, and that the “ball” does not come out of the “cup” (dislocate). Occasionally, the surgeon needs to make your leg longer or leave it short in order to make sure the hip replacement is stable.

WHAT HAPPENS NEXT?

Preadmission
Before your surgery, you will have an appointment in the St. Thomas Elgin General Hospital's Preadmission Clinic. At the time of your appointment, you will have testing and assessments completed along with an education session. Please complete all forms in your surgical package (brown envelope).

Bring your medications in their original containers as well as a completed list of medications with dose and times taken- your local pharmacy may be able to assist you with this. Also bring a list of your allergies and reactions.

Admission to Hospital
You will be admitted to hospital on the morning of your surgery. Once again, bring your medications in their original containers, your completed list of medications including dose and times taken, and your list of allergies and reactions.

After your surgery, you will go to the Post Anesthetic Care Unit (PACU) to recover from your anesthetic, usually a few hours. Once you are ready, you will be transferred to the inpatient surgical unit. Discharge from hospital is planned for **Day 3 or 4** after your surgery (surgery day is Day 0).

Discharge to Home
The majority of patients are discharged directly home with support of family and/or friends. Arrangements for Community Care Access Centre (CCAC) services may be made for you while you are in hospital. CCAC services **may** include nursing, physiotherapy, occupational therapy, or personal support. A decision about which services you may need will be made while you are in hospital.

If you do not feel that you will be able to return home, **you** must make other arrangements for care after discharge from hospital **prior** to your surgery.

Questions:

EXPECTATIONS

Day 0	Day 1	Day 2	Day 3 +/- 4
• Surgery	• Basic exercises • Walk with walker • Sit in chair	• Walk with walker • OT functional assessment • Continue with exercises	• Walk with walker • Stairs • Discharge

For example: If you have surgery on Monday, expect to go home on Thursday, unless complications arise.

***Participation is expected in order to achieve the outcome desired by your surgeon.**

Prior to your surgery please arrange:

- ☐ Walker (no wheels)
- ☐ Cane or crutch
- ☐ Please have railings installed on stairs inside and outside of your home if not already present

Day of surgery please bring:

- ☐ Footwear with rubber/no slip sole and closed toe/heel (Velcro runners work well. It is good to get them ½ size too big)
  No open backed shoes/slippers
- ☐ A full change of loose fitting clothing
- ☐ Walker **and** cane or crutches with you on the day of surgery so that they can be properly adjusted to your height (please label your equipment)
- If possible, have someone bring these items to your room after surgery

Questions: _____

_____

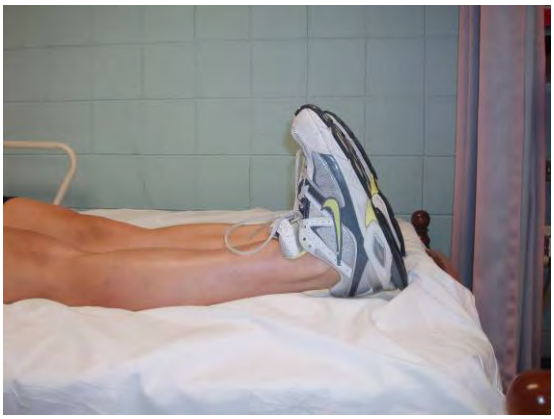
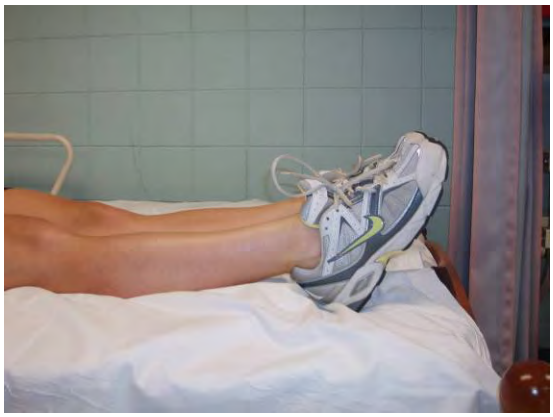
_____

EXERCISE PROGRAM

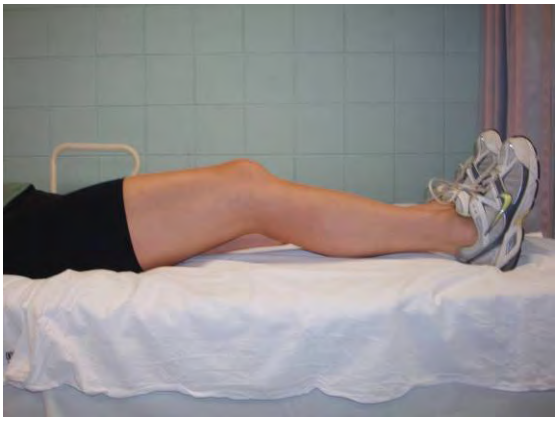
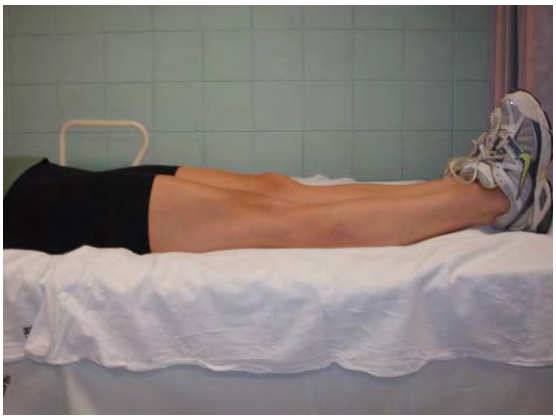
Please note: in all photos, the right leg is the operative leg.

The following exercises are designed to improve your mobility and muscle strength postoperatively. **Repeat exercise 10 times. Do 3 sessions per day.**

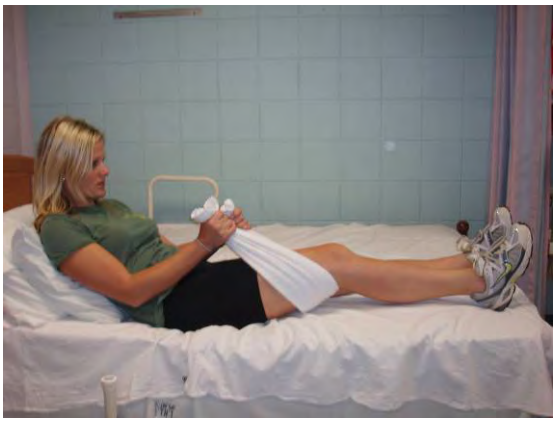
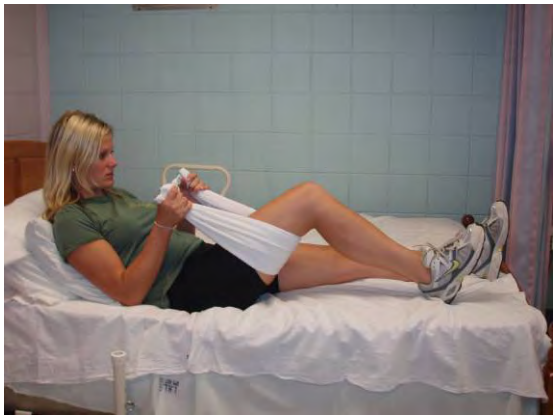
1. **Foot and Ankle Pumps:** Pump ankles up and down. Exercise both ankles every hour while in bed.

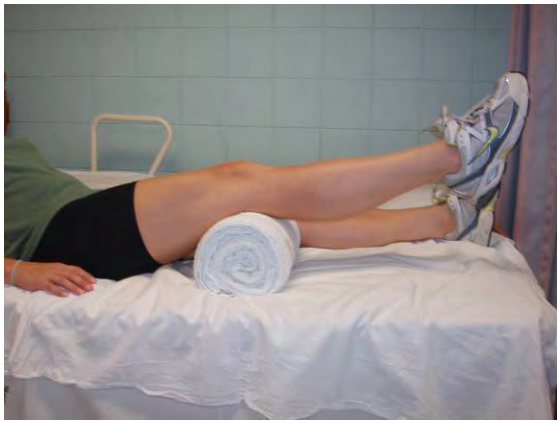
2. **Isometric Quadriceps:** Tighten thigh muscles and press the back of knee down into the bed. **Hold for 5 seconds** and release slowly**.**

3. **Range of Motion:** Lying on your back, slide the heel of your operated leg up towards your buttocks, use a strap if needed. **DO NOT LET YOUR LEG ROTATE IN/OUT OR BEND PAST 90° AT THE HIP!**

4. **Knee Extension:** Place a rolled towel under your knee. Raise your foot up off the bed to fully straighten your knee, use a strap if needed. **Hold 5 seconds** and lower slowly.

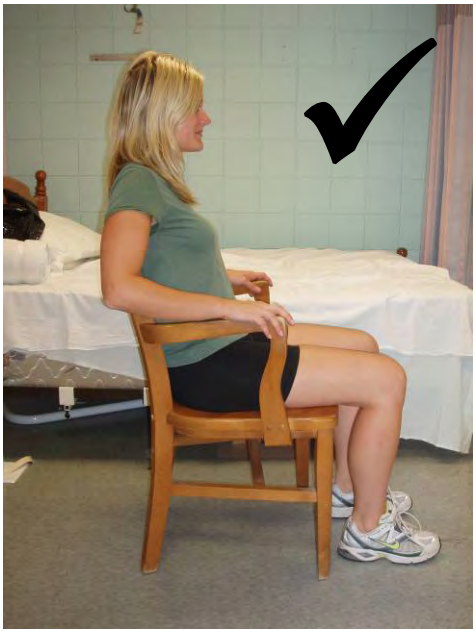



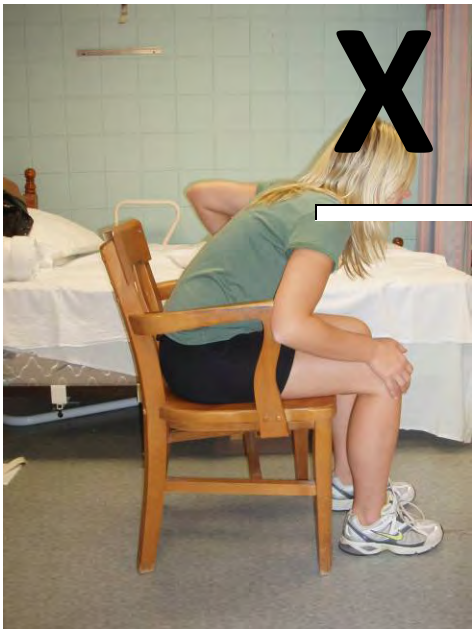
HOW TO PROTECT YOUR HIP

These precautions need to be followed until you are seen at your follow-up appointment and told that it is safe to increase your movements.

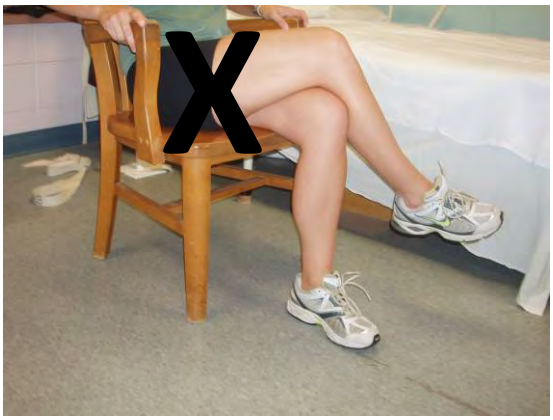
1. **ALWAYS USE YOUR WALKER WHEN WALKING** because you are not allowed to put full weight on your operative leg until your surgeon tells you otherwise.

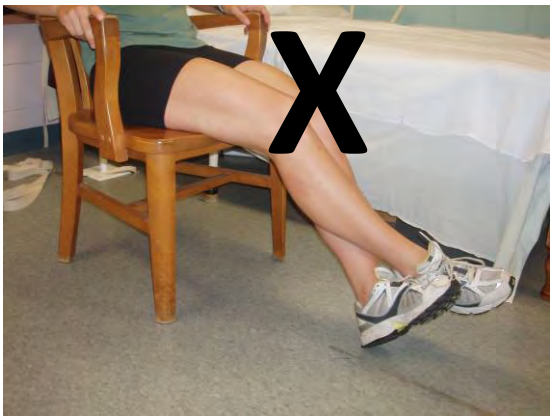
2. **DO NOT BEND YOUR OPERATIVE HIP PAST 90°** when sitting, standing, or lying. When sitting, your knee must be lower than your hip.



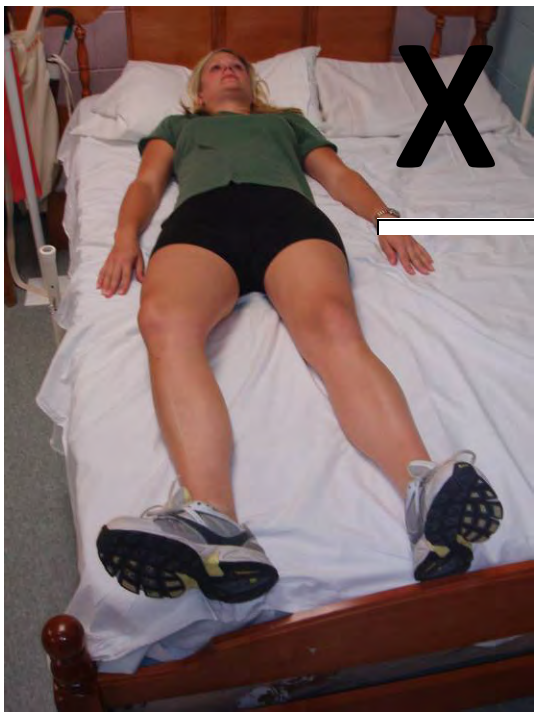


3. **DO NOT CROSS YOUR LEGS** at the knees or ankles.



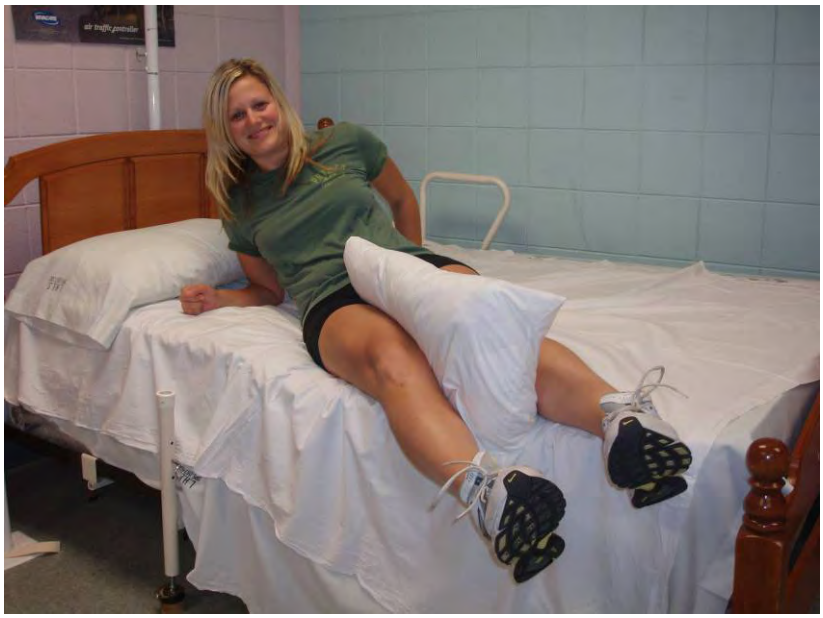


4. DO NOT ROTATE YOUR OPERATIVE LEG IN OR OUT.



DAILY ACTIVITIES

IN and OUT of bed



Use a firm bed. The bed height should be knee height or higher.

DO NOT TWIST to get out of bed. Move your legs to the side of the bed and sit up straight using your elbows/arms. Keep your legs separated (a pillow between your knees may help) while you lower them over the edge of the bed.
To get into bed, use a “leg lifter”, a long non-stretchable belt, to lift the operative leg up into bed. You will be taught by Occupational Therapy how to do this after your surgery.

Standing/Sitting

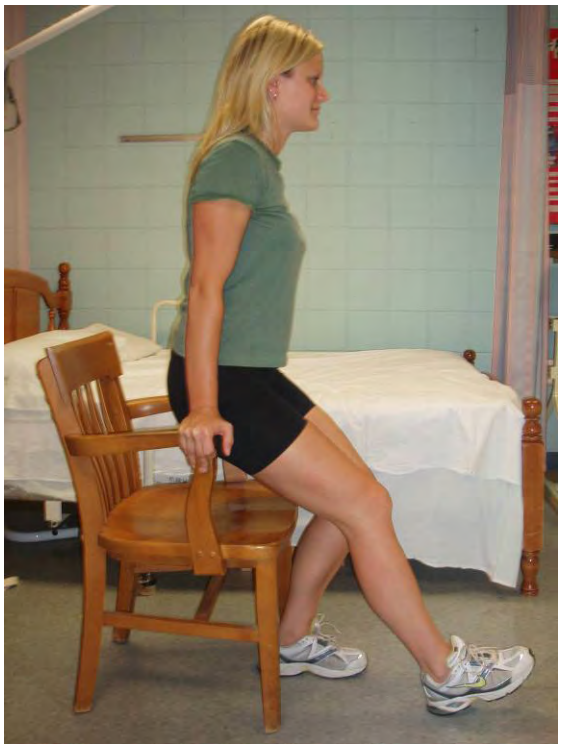
A firm chair with armrests is best. If the chair is too low, sit on a firm cushion to keep your hip in correct position. Avoid recliner chairs.

To stand up:

- Slide to the edge of the chair without bending forward
- Move the foot of the operated leg forward
- Push with both hands from chair, stand up and then grasp the walker. **DO NOT pull up on the walker** to stand up

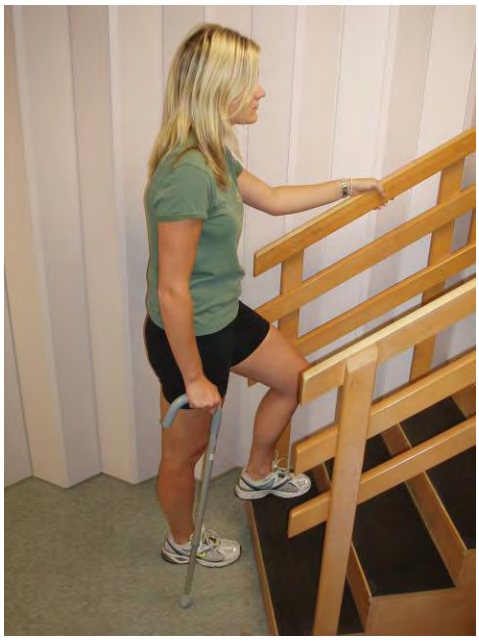
To sit down:

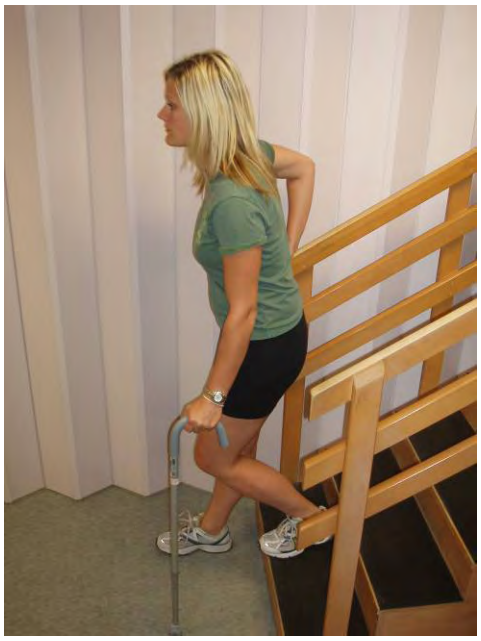
- Back up to the chair until you feel the back of your non-operated leg touching it
- Move your operated leg forward, then reach back for the armrests with both hands, and lower yourself slowly to the edge of the chair. Once seated, you may scoot to the back of the chair, following your hip precautions while sitting



Stairs

- Step UP with the **non-operated leg** FIRST when going UP stairs
- Step DOWN with the **operated leg** FIRST when going DOWN stairs
- **"Good goes up, Bad comes down"**
- One hand is on the railing, the other hand uses the cane or crutch.





Toileting

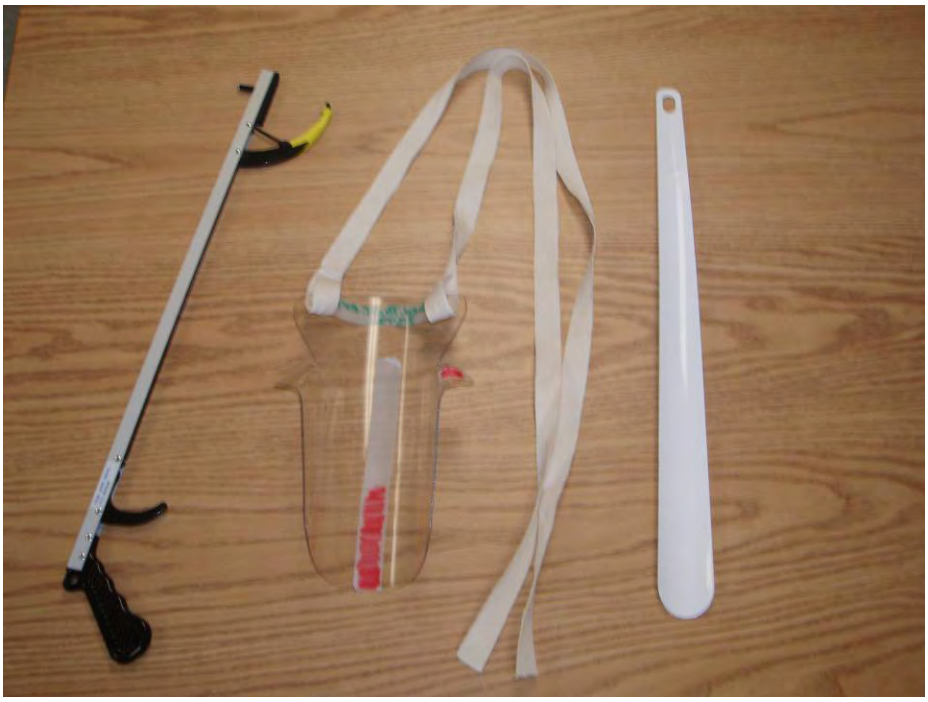
Use the equipment recommended by your Occupational Therapist. Most people can use a raised toilet seat with arms or a commode placed over the toilet.

Dressing

Pants:
While following your hip precautions, avoid reaching past the knee of the operated leg. A reacher is recommended to place the foot of the operated leg into your underwear and pants. Once the pants or underwear are at knee level they can be pulled up using your hands. Dress the operative leg first and undress it last. Stand up and pull the pants and underwear up, have your walker in front of you. It is best to wear pants with an elastic waist; they tend to stay around your thighs better when standing.

Socks:
A sock aid is recommended to allow you to put your sock on your operated leg independently. Use thin loose socks. To take socks off use a long handled shoehorn or reacher to push the socks down and off your heel.

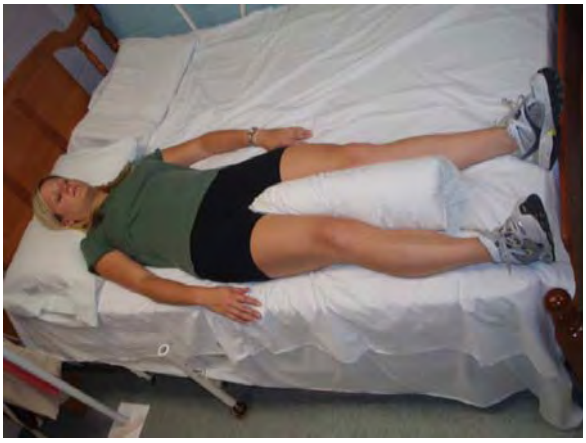
Shoes:
Wear Velcro closure shoes, slip-on shoes or use elastic laces. Use a long shoehorn so you will not have to bend over. Your shoes should be supportive with a wide flat heel and non-slip sole.

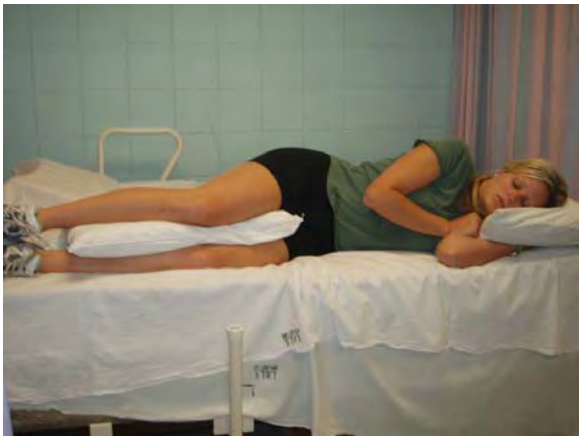


Assistive Devices (reacher, sock aid, long handle shoehorn)

Sleeping

If you tend to cross your legs when in bed, a pillow is recommended. Keep the pillow lengthwise between your legs to decrease the chance of accidentally crossing your legs. You may sleep on either side. When side lying, a pillow needs to be placed between your legs to maintain proper hip position.





Bathing

If your incision is closed with staples you should avoid showering until your staples are removed.

If your shower is in the bathtub, transfer into the tub using a tub transfer bench. Lift your operative leg into the tub using a “leg lifter”. Sitting on a tub transfer bench while showering is recommended. The occupational Therapist will review this with you after your surgery.

If your shower is a walk-in shower a grab bar is recommended to hold while stepping in and out.

Around the House

For the next three months, do not do chores that involve heavy lifting, bending, or twisting. Activities such as vacuuming, taking out heavy garbage cans, cleaning floors, changing beds, or carrying heavy laundry baskets should be avoided. You may do light housework and/or cooking. Use a reacher to pick up objects from the floor, low shelves, cupboards or from the dryer.

Reorganize your kitchen cupboards, fridge, and dresser drawers so things you may need are within easy reach. Have a basket or bag on your walker to carry things (two hands on the walker when walking). To move items around the kitchen, slide them along the counter.

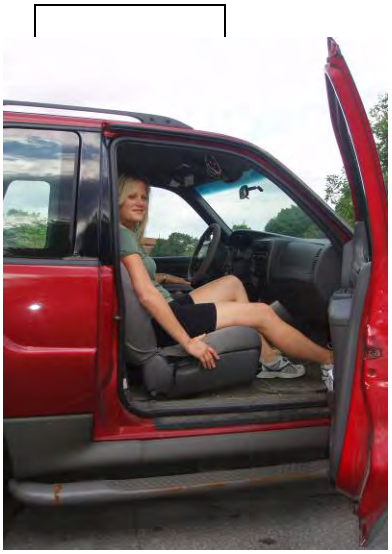
Activity

Balance your rest and activity. Walk every 2-3 hours during the day. Slowly increase your walking distance. Cut back whenever there is an increase in pain that lasts more than 30 minutes.

The Car

You are not allowed to drive for a minimum of 6 weeks after surgery. This will be reassessed by your surgeon at your 6-week follow-up appointment. It is recommended to transfer into the passenger side since you are able to slide the seat back. Slide it back as far as you can. Park the car away from the curb. Walk to the car and turn so your back is to the open door. Back up until your leg is touching the car. Lower yourself down slowly to the seat placing your hands on the back of the seat and the dash. Keep your operated leg straight.

Slide as far back as you can using your non-operative leg. Swing both legs into the car together keeping them slightly apart.



To get out, do the same steps in reverse remembering to slide forward to make it easier to stand.

To increase the ease of sliding your buttocks on the seat, place a plastic bag on the seat.

A GUIDE TO ASSISTED DEVICES, EQUIPMENT & SUPPLIES

You are **REQUIRED** to bring in the following items to hospital on the day of your surgery (have someone bring to your room after surgery):

- **Standard walker (no wheels)**
- **Cane or crutch (for use on stairs)**
- **Full change of loose fitting clothes**
- **Walking shoes**

Prior to your surgery, an occupational therapy home assessment will be initiated by Elgin Community Care Access Centre (ECCAC). They will be able to recommend equipment necessary for your recovery.

The following is a list of devices and equipment that may be helpful to you when completing everyday activities at home.

BATHROOM EQUIPMENT

Raised Toilet Seat

Versa Frame

Grab Bars

Tub Seat/Shower Chair

Hand Held Shower

Commode Chair

ASSISTIVE DRESSING DEVICES

Sock Aid

- To help put on socks or hosiery without bending at the waist

Elastic Laces

- Makes any lace-up shoes into slip-on shoes

Long-Handled Reacher

- To avoid bending to the floor, reaching overhead or for assist when dressing

Long-Handled Shoe Horn

- To prevent bending greater than 90^0 when putting on shoes

Long-Handled Sponge

- To help with bathing

The occupational therapist who sees you pre-operatively will help you choose which devices are most appropriate for you and your home.

EQUIPMENT PROVIDERS

- A list of businesses that sell or rent equipment is available in the yellow pages under "Home Health Care"

**** The hospital does not provide equipment for purchase or rental**

Calcium-Rich Diet

What is a Calcium-Rich Diet?
This diet is designed to provide you with foods that are high in calcium. The best source of calcium in your diet comes from milk and milk products. Calcium is also found in foods such as dark green vegetables, nuts, grains, and beans.

Why do you need this diet?
Eating calcium-rich foods will help you maintain strong bones and teeth. A good calcium intake throughout your life can help reduce the risk of developing osteoporosis.

How much Calcium do you need everyday?
Calcium absorption requires Vitamin D. It is important to have a good intake of both in order to have healthy bones.

	Calcium	**Vitamin D**
Age	**mg/day**	**I.U.**
19-50 years	1,000	400
51-70 +	1,200	800

What to do?
- ✓ Select milk as a beverage with meals or when eating out
- ✓ Use yogurt as a dip, garnish, spread, or dressing
- ✓ Look for calcium-fortified beverages like orange juice or soy milk
- ✓ Make soups with milk instead of water
- ✓ Add beans or nuts to salads, soups, and casseroles
- ✓ Melt cheese onto meats, vegetables, eggs, and tortilla chips
- ✓ Add canned salmon to sandwiches, salads, and casseroles

Food Sources of Calcium
Cheese, yogurt, milk, sardines, canned salmon, almonds, broccoli

Calcium supplements
It is best to obtain your calcium from food sources. Read labels carefully when taking supplements to understand exactly how much elemental calcium you are getting.

**Adapted from Dietitians of Canada* *www.dietitians.ca*

Information also available at www.osteoporosis.ca

Iron-Rich Diet

What is an Iron-Rich Diet?
This diet is designed to provide you with foods that are high in iron and foods that help your body use iron. Iron is a mineral that you need to help carry oxygen through the body. Without enough iron you can become very tired, pale-looking and irritable.

Why do you need this Diet?
Blood loss during surgery is very common. An iron-rich diet will help restore your body's iron stores necessary for hemoglobin. Hemoglobin is part of your blood and helps carry oxygen throughout your body.

Heme and Non-Heme Iron
Food contains iron in two forms: heme and non-heme. Heme iron is better used by your body than non-heme iron. Heme iron is found in meat, fish, and poultry. Non-heme is found in beans, grains, nuts, and some fruits and vegetables. Eating or drinking foods rich in Vitamin C will help you body use the iron.

What to do?
- ✓ Include at least one iron-rich food and one food rich in vitamin C at each meal
- ✓ Try adding cooked beans or lentils to soups, stews or casseroles
- ✓ Choose breakfast cereals fortified with iron
- ✓ Choose dark green and orange vegetables and fruits more often. For example, choose spinach instead of lettuce for your salad
- ✓ Have spaghetti with tomato meat sauce rather than cream sauce
- ✓ Choose dried fruit as a snack more often
- ✓ Try adding raisins or other dried fruit to cereal or in your favourite cookie/muffin recipes
- ✓ Try having a glass of orange juice with your cereal at breakfast

Avoid having coffee or tea with meals as it may decrease iron absorption.

Food sources of iron
Canned clams and oysters, liver, white beans, kidney beans, pumpkin and sesame seeds, chickpeas, beef, dark turkey meat, lima beans, enriched egg noodles, fortified breakfast cereal.

**Adapted from Dietitians of Canada* *www.dietitians.ca*

Joint Arthroplasty Surgery Patient Agreement

For your own safety as well as a positive outcome, it is important to discuss with your family and friends your decision to have surgery. Please discuss with them how they may be of assistance to you before, during, and after surgery. **If you do not agree or are unable to sign this form, *please contact your surgeon's office*. Your surgery is subject to cancellation.**

Things to consider and arrange are:

- ☐ I am aware discharge is 3-4 days after surgery
- ☐ I am aware that Community Care Assess may come into my home pre and post operatively for PT/OT assessments
- ☐ I will make arrangements for transportation in an appropriate vehicle to take me home and to my appointments following surgery
- ☐ I understand that a physiotherapy program is required pre and post operatively, in order to benefit my recovery. I know that there may be costs associated with an outpatient physiotherapy program and I am able to commit to this
- ☐ I will arrange for someone to assist me with stairs when I first go home
- ☐ I will arrange for help at home following discharge i.e. assistance with grocery shopping, meal preparation, house cleaning, laundry, and general errands after surgery
- ☐ If I feel I will be unable to manage at home, I have made arrangements for an alternate discharge destination i.e. convalescent or respite bed, relative's or friend's home

- ☐ I will arrange the following:

  <u>Mandatory:</u>
  - ☐ Standard Walker (with no wheels)
  - ☐ Cane or crutch
  - ☐ A chair higher than knee height with arm rests and a firm and level seat
  - ☐ A bed higher than knee height
  - ☐ Raised toilet seat with arms or raised toilet seat with a versa frame

  <u>Optional:</u>
  - ☐ Commode chair
  - ☐ Tub transfer bench or shower chair
  - ☐ Long-handled sponge
  - ☐ Long-handled reacher
  - ☐ Long-handled shoe horn
  - ☐ Sock-aid
  - ☐ Other: _____