Moving Towards a Better Quality of Living

MY KNEE SURGERY

KNEE ARTHROPLASTIE

GUIDE FOR PATIENTS

PATIENT'S NAME: _____

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Québec

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Introduction to MY Surgery

Soon you will undergo an operation to replace the damaged and painful surfaces of your knee with an artificial prosthesis to give you a better quality of life.

☞ *It is known that patients who take an active part in their health treatment and that prepare mentally and physically generally have less complication, less pain and have a more rapid recovery than those who do not prepare.*

We created this guide with the co-operation of the team which will support you during the various stages of your surgery. It is an indispensable tool to being an informed patient.

Please read this guide and bring it with you to every appointment. As you read, note your questions on the last page of this booklet and ask them at your next appointment. Use it to prepare yourself before, during and after your surgery.
Don't forget that you are at the heart of your recovery. You are the central person in the process that is **YOUR** surgery.

Length of your Hospital Stay and Recovery

The planning for your release from hospital starts with receiving the envelope that confirms your registration on the surgical list for your total knee replacement. You must be involved in all the stages of your care. You must participate and help in the planning with an eye to your recovery and returning to your home as soon as possible.

At you first meeting at the pre-admission clinic, the nurse will go over the preparations that you have planned. It is not mandatory to have a care-giver at all times, but it is recommended that you have someone with you when you come to your appointments and who can help you when you return home. It is preferable to prepare beforehand. Do not hesitate to find out which services your local CLSC can offer you.

Planning my Surgery - Carefully read this section and note your questions

The length of your hospital stay will vary depending on your state of health and your rate of healing. The majority of people who have this surgery return home **2 to 3 days after the operation**. If you have surgery on Monday you can expect to go home on Thursday or before. If your state of health requires further care, the care team will see to it.

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NB ***Neither age nor the fact to live alone, are criteria to stay longer in the hospital or to be accepted as an in-patient at a rehabilitation center.***

After your short hospital stay, **you will return home**. At home cares will be offered by the CLSC responsible for your region.

Nurses will come to your home to provide the necessary care you need (evaluation of your level of health, take care of your wound and dressing, do blood tests, etc.). Physiotherapists from your CLSC will also come to your house for treatments for a few days after your surgery. Homecare from these nurses and physiotherapists generally do not last more than a week. You need to be ready, as most patients are, to go out for your physiotherapy starting at your 10th day after surgery. You need to plan and pay for your own transportation. Don't forget that you will probably not be able to drive for about 6 weeks.

My Role in MY Surgery

The surgery you are about to have is called elective because it is performed in a non-emergency context. It is devised to reduce pain and/or correct a health problem **and make your quality of life better.**

The decision to go through with this operation is yours. In this light, be conscious that it's ESSENTIAL and OBLIGATORY that you do everything to make yourself informed and prepared **YOU are the person in charge of making this work and of having a successful recovery**.

Knee Surgery and its Predisposing Factors

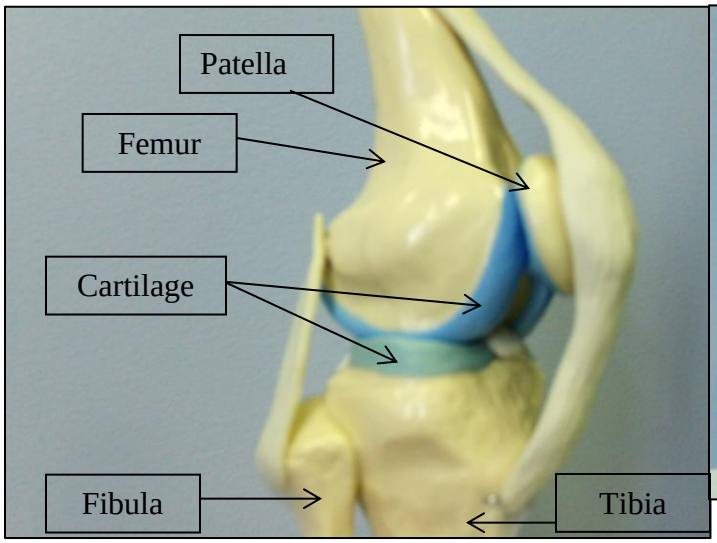
You are living with knee pain that interferes with your regular activities and has reduced your quality of life. Your doctor has been unable to improve your condition with non-surgical treatments such as specific reinforcement exercises and medication. Your orthopedic surgeon has therefore proposed a total knee replacement to relieve your pain and allow you to take back your active lifestyle.

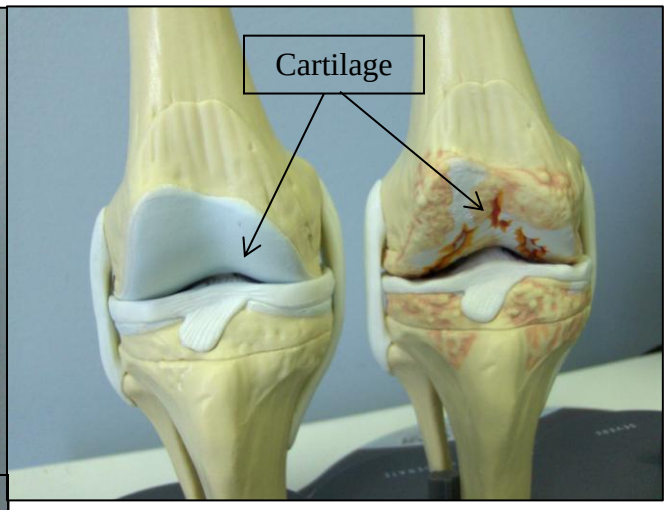
Anatomy and a Description of Knee Disease

The knee joint is making the link between the femur (thigh bone), the tibia (leg bone) and the patella. It allows you to fold and stretch out your leg. Muscles and ligaments support and allow movements and keep the joint in place. The bones are covered in cartilage, this covering allows your knee to move comfortably without pain. Muscles and ligaments support and allow movements and keep the joint in place.

When the cartilage is damaged, the surfaces of the joint do not slide well against each other and this can cause pain, stiffness and inflammation. The surfaces become rough and deformed. This is called osteoarthritis or degenerative joint.

There are many causes for the degeneration of the knee joint. The problem could be the result of a knee fracture, from the degeneration of the bones, from bone disease or an inflammatory disease such as rheumatoid arthritis, a lack of blood supply to the bone (avascular necrosis) or from simply being worn out as a normal result of aging.





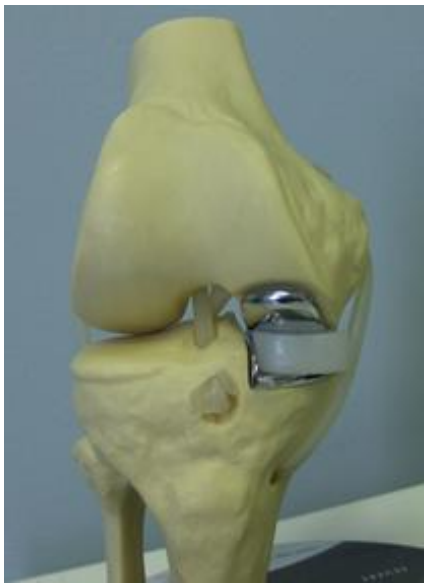
Normal knee Osteoarthritic knee

Unicompartimental Knee Prosthesis or Knee Arthroplasty: Total Knee Replacement Surgery (PTG).

Two types of surgery can be propose according to the wear of your knee.

Unicompartimental Knee Prosthesis

This surgery will be propose to you if only the internal side of the articulation is worn. It aims to replace only the damaged part by an artificial prosthesis while maintaining intact the healthy side. This surgery allows a faster recovery and sometimes a shorter hospital stay, but requires the same preparation and the same monitoring as total knee replacement.



Unicompartimental Knee Prosthesis

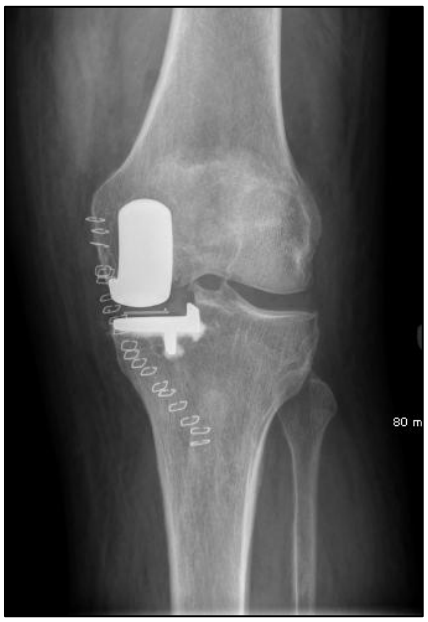
Total Knee Replacement Surgery (PTG)

The surgery involves replacing the two articular surfaces (internal and external) of the tibia and femur by an artificial prosthesis. In addition, the surface of the patella may also be replaced according to the degree of wear found.

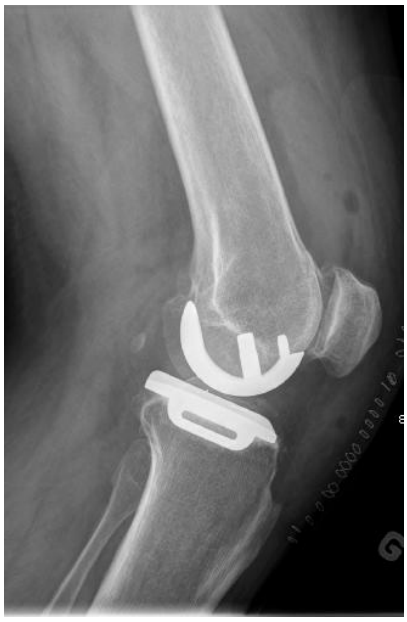
The surgeon makes a vertical incision in your knee. He releases the articulation of its muscles and ligaments. According to precise calculations from your pre-operative X-rays, the surgeon removes the damaged parts and replace them with artificial implants. When the prosthesis is in place, he repairs and replaces the muscles and ligaments around the prosthesis. He then closes the wound with stitches and / or metal staples. He inserts if needed a drain into the joint to drain the blood that it has accumulated. He covers the knee with a bandage. Several times during surgery, he tests the movement of the prosthesis to ensure that it is stable and moves well.

Following your surgery, an X-ray is made to ensure that all components are in place and there were no complications during the procedure (ex.: a fracture). You can put your weight on your leg as tolerated up to 100% on your first raise. Otherwise, your surgeon will specify the restrictions in your file, so that you and caregivers can follow them.

Unicompartimental Knee Prosthesis

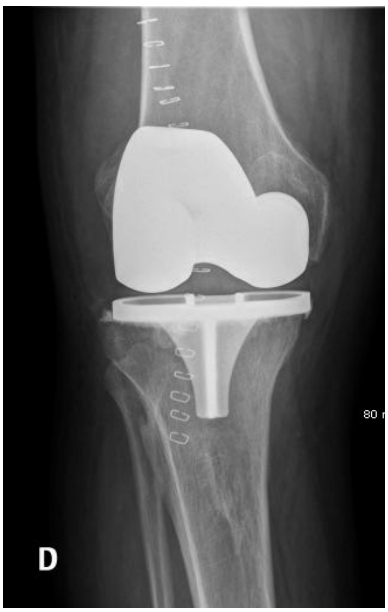


Front view

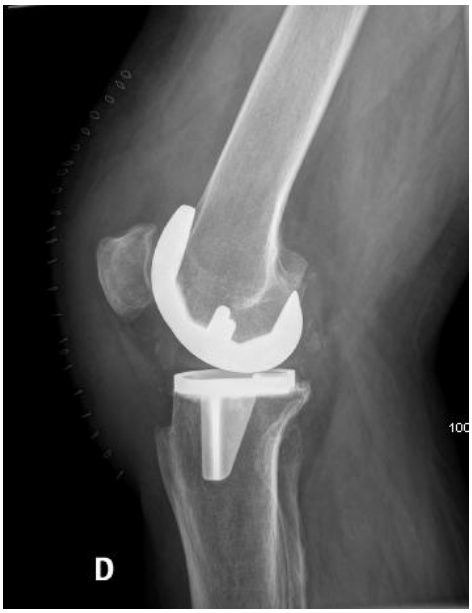


Side view

Total Knee Replacement Surgery



Front view



Side view

Materials and fixation of the prosthesis

Prostheses are made from different materials such as plastic (polyethylene) and different metals (cobalt-chromium or titanium). They come in different sizes and adapt to the morphology of each. These components are fixed with surgery cement.

The surgery cement is an acrylic polymer clay that hardens in about 10 minutes and ensures the stability and strength of the prosthesis.

Planning for My Surgery

Arranging Your Living Space

Good preparation of your home in anticipation of your return from the hospital after surgery will make your convalescence easier and also make moving around your home safer and reduce your risk of falling.

Carry a cell or cordless phone with you at all times in case of an emergency.

- Remove all throw rugs or mats
- You will be using a walker that is 24 inches wide when you return home. Clear the access to places in your home such as hallways and stairs. Remove anything you might trip on, for example, small furniture and things on the floor like wires, plants, and decorative objects.
- Be sure you have enough light to see where you need to walk both during the day and at night. Install a night light.
- Be sure that pets do not trip you. You might want to find someone to take your pets or board them during your rehabilitation time.
- Be sure that staircases leading to rooms in your home have sturdy bannisters.
- Place all objects that you use every day at a level which is easy for you to reach.
- Be sure that you have at least a 24 inch clearance to reach your bed.
- Think about sleeping on the side of your bed that is closest to the door to facilitate your movement.
- The bath mat beside your bath tub must be non-skid. Hang it over the edge of the tub when it is not in use.
- A non-skid bath mat must also be used in your bath tub to avoid falling.
- If you have fallen in the past few months, try to figure out why you fell so you can avoid falling again.

Tips and Advices Before your Surgery

To be better prepared for going home:

Planning for Meals

- Keep objects that you use often on the counter instead of in lower cabinets.
- Cook and freeze things you would like to eat before you enter the hospital or buy ready to serve meals. You will appreciate them after your operation.
- Stock your pantry before you go into the hospital. Find out if merchants and stores you deal with (pharmacy, grocery store, etc.) have a delivery service you can use by phone and write down the phone number. Some merchants (stores) are also accessible by internet. This can be very useful, especially if you live alone.
- Contact your local CLSC and find out which services are available in your area such as meal delivery services (Meals on Wheels).

Light Housekeeping

- Before surgery do a complete cleaning of your home and do your laundry so that you have very little to do when you return home.
- Place a chair near your washer and dryer so that you can sit down if you want to while you do laundry after your surgery.

Outdoor Upkeep

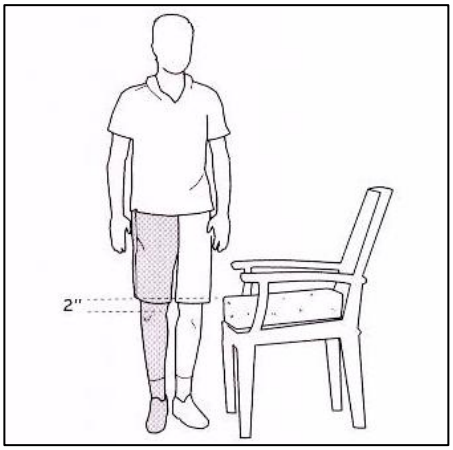
- Arrange for someone else to do the upkeep of your lawn and garden or remove snow from your driveway and walk.
- In winter make sure that the entryway to your home is cleared and safe so you can go out without slipping and people coming in to help and/or treat you can enter safely. You will NOT be able to do this job yourself.

Transport

- You will need someone to transport you to your physiotherapy treatments and doctor's appointments. During the period that you are unable to drive, find someone to drive you. If you need someone able to pick you up and take you out, contact your CLSC (in advance) for the names of services that are available. When you call, find out how much these services will cost.

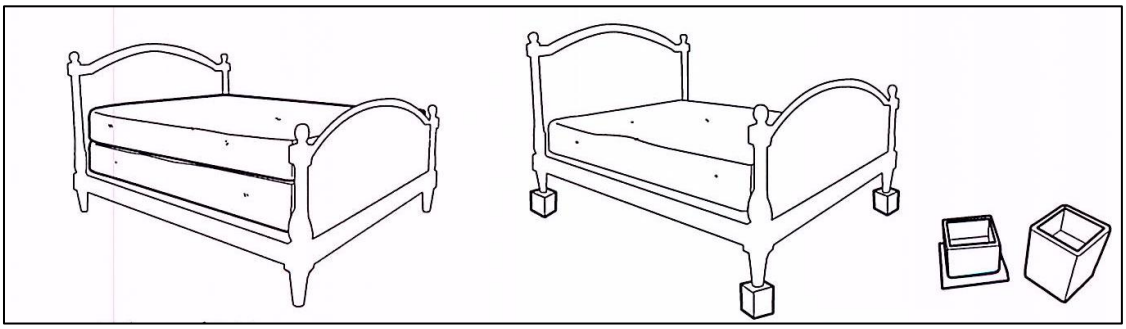
Necessary Equipment

- Be sure that all the chairs and sofas you will sit on have armrests. The places you will sit should be at least two (2) inches higher than the back of the bending area of your knees. They also need to be sturdy and stable. You can always add a thick pillow on the seat of your chairs or double the cushion on your sofa to raise the seat to the necessary height so that you can sit in the right position and be comfortable and safe.



Source : Vancouver Coastal Health

- Avoid chairs on wheels, rocking chairs or ones that are not stable.
- Avoid sofas that are low, very soft and/or very deep.
- In general, a firm bed (at least two (2) inches higher than the back bending area of your knees) will make getting in and out of bed much easier. If your bed is very low you need to have it raised before you get home.



Source : Vancouver Coastal Health

Extra mattress ***Bed raised on blocks***

- Choose a walker with wheels in the front and skis in the back (especially if you have carpeting in your home). A 4 wheeled walker is not recommended because it is not stable and you risk falling if you use it.

	
Walker = front wheels and skis behind	4 wheeled walker (not recommended)

Many aids to make your life easier are recommended. In certain cases you may get them at the CLSC or you can buy them at stores that sell medical aids or your pharmacy. The CLSC is there to help you, but can't assure that you will have access to equipment without a charge. It is preferable, if you have insurance that you ask your provider if the equipment you require is covered by your policy. In certain cases, the rental or purchase of your needed aids will avoid problems for you. When you know the date for your surgery we suggest that you contact your CLSC to see what services they offer.

When you are contacted by the hospital to confirm your date (48 hours before surgery) be sure that you have procured everything you will need and that you have it all at home so that it is ready for you when you return home.

NB You should only go and pick up your things at the CLSC 48 hours before your entry to hospital for surgery

You must arrange to have a walker, a cane and a raised toilet seat before you go for surgery

If you are planning to do your rehabilitation at another address than your own (for example at the home of one of your children), you need to let us know as soon as possible so that we can assure the preoperative and postoperative care you require can be undertaken by the CLSC in the area you will be convalescing in.

For a list of equipment you will need, consult the list on page 84.

My Daily Activities

Hygiene

- You will be washing yourself in a sink for the first 10 – 14 days after surgery because you are not allowed to get the dressing wet. Wash your hair in the kitchen sink or with a dry shampoo.

- When you are allowed to take a shower, if possible use a shower chair rather than a bathtub so you minimize the risk of falling.

- If showering is only possible in a bathtub, then a shower chair or a bathtub transfer bench might be required. Grab bars are not always required.

Wait for the evaluation of a health professional, who will advise you of what your situation requires for your preoperative and postoperative care.

- Be sure that you have an anti-skid bathmat installed on the floor of your shower or bathtub before you enter.

- For the first weeks, use a long handled bath brush to wash lower than your knees so you can avoid to fall when bending.

- To avoid falling, sit down to dry yourself. Use a long towel to dry the bottom of your repaired leg in the same way you would dry your back. Put a towel onto the floor to dry your feet.

Getting Dressed

- Choose clothing that is easy to slide into such as elastic-waist pants.
- Use shoes or slippers that will adapt to the swelling of your feet and that can be put on without bending such as those with elastic laces and Velcro.
- When you get dressed, sit on a chair or on the edge of the bed if the mattress is firm and not too high so you can avoid slipping and falling.
- Use the recommended aids (sock-aid, reaching tong, long handled shoe-horn, etc.) so you can do things by yourself for the first few weeks.
- If you do not have any dressing aids, you will need someone to help you dress and put on shoes for the first weeks.
- Always dress your operated leg first as you put on your clothes and last as you undress.

Using the Washroom

You can use a raised toilet seat for about 6 weeks after surgery to prevent the risk of falling. These seats exist with and without armrests. Also, the installation of a grab bar might be practical. Ask at your CLSC for advice about which would be the best for your situation.

- The height of your toilet seat must be two (2) inches higher than your knees.

- Never use the toilet paper holder or the towel rack as a way to get yourself up.

Carrying Things

Avoid carrying things in your hands when you are moving around with the aid of a walker or a cane.

- Use a basket or a bag that is attached to your walker to transport your objects. You can also use a backpack on your shoulders.

Getting Items that Are Out of Easy Reach

- Do not use a stepstool or ladder to get items that are too high to reach. A fall can result in very serious consequences.
- Maneuvers to do to pick up objects on the ground during the first weeks and until your strength and leg flexion are fully recovered.

To reach an object that is lower than your knees, use a reaching tong.

You can pick up things by putting your repaired leg out behind you and flexing the non-operated leg. It is suggested that you have something solid and braced to hold onto as you do this maneuver to avoid falling

Before Surgery

Date and Time for Admission

The pre-admission service (reception desk) will call you to give you your surgery date. You will receive a mandatory confirmation call **48 hours** before the arranged date of your surgery.

ATTENTION

If you have any of the following signs or symptoms a few days before your date for surgery :

- ❒ Sore throat, cold or flu
- ❒ Fever
- ❒ Are taking antibiotics
- ❒ Have a contagious disease like Chicken Pox or have come into contact with someone who has a contagious disease
- ❒ Have any type of infection (dental abscess, urinary tract infection, ingrown toenail, etc.);
- ❒ An injury to your skin in the region that will be operated on
- ❒ Any other type of illness
- ❒ A possible or unconfirmed pregnancy.

Communicate without delay with:

- ***The Orthopedic Pre-admission Service ☎ 450 975-5487***

Preparations Leading up to Surgery

Medications to Stop

Stop any antiaggregant medications and all medications that can play a role in blood coagulation.

Instructions about the following medications will be given **at your preadmission appointment**

- ***Aspirine®, Asaphen®, Rivasa®, Entrophen®, Novasen®, Per, MSD AAS®, Dipyridamole/AAS, Aggrenox®, etc***.
- ***Brilinta®***
- ***Plavix®, Effient®***
- ***Ticlid®***
- ***Anti-inflammatory medication*** *(ex. : Ibuprofen : Advil®, Motrin® including those for children, Celebrex, Maxidol®, Aleve®, Naprosyn®, Naproxen®, etc.)*
- ***All naturopathic drugs*** *(glucosamine, Omega 3, vitamin E, etc.)*
  - Stop these seven (7) days before surgery.

NB ***You can still take medications like Tylenol®, Tylenol® extra-strength, acetaminophen and Tempra® up until the day of your surgery.***

Stop All Anticoagulants (Medications that Thin Blood).

- ***Coumadin®, Sintrom®, Pradaxa®, Xarelto®, Eliquis®, etc***.
  - Stop these drugs with the recommendation of the **anticoagulant clinic.**

A pharmacist from the anticoagulant clinic of the hospital will contact you by phone about one week before your operation and advise you when to stop and how to proceed.

There will be a blood test to look at your baseline levels the morning of the surgery.

Tobacco Restrictions

We strongly recommend that you stop using tobacco products. Anesthesia medications stimulate mucus production which stays in your lungs. If you are a smoker, your lungs already contain a large quantity of mucus. Consequently, if you smoke your risk of lung related complications are higher than those of a non-smoker. Also, smoke and general anesthetics equally cause an irritation of bronchial mucus.

Added to respiratory problems, tobacco slows the healing of the bones around your prosthesis, slows the healing of your wound, raises the risks of infection of the prosthesis, and raises your risk of circulatory problems like; thrombosis, pulmonary embolisms and more.

We also remind you that smoking is strictly forbidden inside the hospital.

Preoperative Diet

- As of midnight the night before your operation you must fast. You can't eat or drink anything.
- Do not chew gum
- You can brush and rinse you teeth as long as you don't swallow any water.

⇒ ***If you do not respect these instructions, your surgery will be cancelled.*** ⇐

Before Leaving Your Home on the Morning of Your Surgery

Medications to Take that Morning

The morning of your surgery before leaving home, you must take your medications for your heart, for blood pressure, for asthma, for epilepsy, and your anti-depressants **with a sip of water. (See p. 86)**

You must not take your medications for diabetes (for example: Diabeta®, Glucophage®, Metformin®, Avandia® or insulin, etc.).

Showering and Cleanliness

The morning of your surgery, be sure to have no make-up on, and remove your nail polish from your hands and feet so that we can monitor the color of your face and extremities. This is true for any type of anesthesia. You also must remove any type of false nails including those done with Bio gel©.

Next, you must take a **shower** with antimicrobial (Dexidin 4 %). This is **obligatory.** This soap continues its disinfectant action even after you rinse it off. It is also important to put on no moisturizing cream, NO deodorant and no perfume in the interest of not interfering with the efficiency of the soap. Also, it is important that you put on fresh clean clothing that you have not worn since laundering.

You can purchase this soap from the gift shop situated in the main lobby of the hospital or at your pharmacy.

Why use this? Normally microbes live on your skin and protect you from germs that could make you sick. When the integrity of your skin is breached, for example during surgery, these germs find themselves in a place that is not their accustomed habitat and can cause infections.

Important to know: Remove **all** your metal **jewelry** and leave it at home.

- Your rings will be cut off if you did not remove them yourself.
- All metal jewelry and metal objects including those in your piercings must be removed before you arrive at the hospital. These objects can't be removed at the hospital. **Failure to remove these items may result in the cancellation of your surgery.**

- A ring or a metal object might cause
    - An edema (swelling) in your finger.
    - You risk being burned if the surgeon uses and electric cauterizer during surgery.
    - An extra risk of infection.

Shaving

NO shaving should be done at home. If shaving of an area is necessary it will be done at the hospital. All nicks or cuts to the skin in the area of your surgery could be a reason to cancel your operation because these will raise the risk of infection.

Important to Remember

We want to minimize the clutter in a room to shrink the chances of falling :

- Advise your family and friends NOT to send or bring flowers and decorations to the hospital.
- Put all your personal effects into a small suitcase that can easily be stored in the locker in your room.
- Leave all non-essential items at home.
- Leave any items of value and large sums of money at home.

NB ***We are not responsible for any personal items that are lost, stolen or damaged. Our lockers do not lock.***

Arrival at the Hospital

- The morning of your operation you must come to the hospital by 8:00 am (or the time you were given by the person who confirmed your surgery), you must go to admitting (reception service) room RC-5 situated to the left of the main entrance of the hospital.

- Be on time for your appointment, because all delays can delay or cancel your surgery.

Arrival at the Day Surgery Unit or at the Orthopedic Unit at the 5th South-West

Before your surgery you will be directed to the orthopedic unit in the 5th south-west. If your room in the Orthopedic Unit is not ready you will be sent to the Day Surgery Unit so that the final preparations for your surgery can be completed. A volunteer will guide you to where you need to go. After your operation you will be hospitalized in the 5th south-west for the rest of your hospital stay.

At your Arrival at the Day Surgery Unit or at the Orthopedic Unit (5th South-West)

The nurse will:

- Give you a hospital gown and an identifying bracelet
- Verify the preparations you were supposed to do at home
- Evaluate your vital signs and do any necessary last minute preparations
- Give you any preoperative instructions necessary
- Verify the consent forms for surgery and anesthesiology and have you sign them if you have not already done so.

Consenting to Surgery and Anesthesiology

If the consent forms for surgery and anesthesiology were signed during your interview with the nurse in the pre-admission clinic or the morning of the operation, it is clear that all the implications and risks as well as the unexpected results have been explained to you **by the surgeon**.

Make sure that any questions or omissions of information relating to your surgery have been explained to your satisfaction. If you still have any question, the pre-admission clinic nurse will explain the details on how you can obtain this missing information. In this case, you will have to sign the consent forms on the morning of your surgery.

Premedication

If you are feeling nervous or worried, you can speak to the nurse. Based on the nurse's evaluation and on protocols, you can be offered a medication to lessen your anxiety.

When you are Called to the Surgical Unit

You must :

- Go to the washroom and empty your bladder
- Remove your underwear and only be wearing your hospital gown
- Remove your glasses, contact lenses, dentures, hearing aids, wig or toupee, jewelry, piercings and all metal objects. Put everything into a well labelled container. Give this container to the person who came with you. In the case that you have come by yourself, put everything into a bag with your name on that will be send to your room as soon as it is ready.

Next, an orderly will take you on a stretcher to the operating room.

Operating Room

The wait to enter the operating room can vary from 20 to 50 minutes. While waiting you will be lying down on a stretcher in the surgical block waiting room. The length of the operation is approximately 1 hour and 15 minutes to 2 hours. You will spend between 1 and 3 hours in the recovery room. Advise your family to not be worried if there is a long delay for your return to your hospital room because the delay can be for all sorts of reasons.

Types of Anesthesia

In the Operating Block you Will Meet your Anesthesiologist

The anesthesiologist will consult your chart and look for any information that will influence how your body will react to the substances and procedures used to anesthetize you. This specialist is used to dealing with different illnesses that can affect you and knows the implications that are related to anesthesia and surgery.

You will receive an explanation of which type of anesthesia is best for you in relation to your general health the intervention you are undergoing.

The 2 types of anesthesia used in knee replacement surgery are:

General Anesthesia:

This is a state that resembles sleeping. During general anesthetic the anesthesiologist will keep you in an unconscious state with strong drugs that will allow surgery without pain. These drugs are administered in an inter-venous solution. We will administer oxygen with a facial mask until you are unconscious. Then, we will replace the mask with a tube down your throat and you will be placed on a respirator. During the surgery, the anesthesiologist and the team will observer your general state and are ready to act if the need arises.

At the end of the operation the anesthesiologist will wake you using medications that will reverse the effects of the anesthesia drugs. The tube is removed from your throat and oxygen is administered with a facial mask.

Possible Problems with General Anesthetic:

- You might feel nauseous and vomit when you wake up
- You might have a sore throat or hoarseness that can last a few days caused by the passage of the tube during anesthesia.
- Dental trauma is possible, but rare. Advise your anesthesiologist of any fragile teeth or dental appliances.
- Repercussions on certain bodily functions (heart, lungs, kidneys, brain) are possible. Your anesthesiologist will discuss any of your concerns with you.

NB ***If you feel any discomfort due to nausea and vomiting don't hesitate to speak to your nurse. Protocols have been put in place to allow the administration of medication to remedy these undesirable effects.***

Spinal Anesthesia:

This type of anesthetic consists of injecting anesthesia into the base of your back that will eliminate all pain sensations in your lower body. So that this injection is not painful the anesthesiologist will freeze the surrounding area. Next, an anesthetic substance is injected that will anesthetize your lower body and stop your ability to move during surgery. When it's possible, a dose of an analgesic drug is injected through the needle already inserted into your back. This dose of medication will bring you relief from pain for the first 18-24 hours after your procedure. With this type of anesthesia you can remain completely awake and aware throughout your surgery. If you are anxious and prefer to have the least amount of awareness possible during your operation, tell your anesthesiologist. If it is possible, a sedative will be added to your solution that will allow you to doze and lightly sleep.

Advantages to Spinal Anesthetic:

- Avoid losing consciousness and eliminate some of the risks of general anesthesia.
- Nausea and vomiting are rare
- Pain begins later.
- You can begin to eat sooner.
- Possibility of reducing your risk of thrombosis.

Cons of Spinal Anesthesia:

- Headaches (1 % of cases);
- Occasional itching
- Urine retention (you don't urinate);
- Risk of paralysis (extremely rare);
- If the spinal anesthetic does not work you will have to have a general anesthetic.

The nerve block:

This type of anesthesia is used in conjunction with general or spinal anesthesia. It is used to treat your pain better and reduce the administration of narcotics following surgery.

This procedure is painless and is done in a room adjacent to the operating room before your surgery. The anesthesiologist makes an injection in the groin or thigh in order to anesthetize a nerve responsible for pain in your knee. The anesthesiologist can make a single injection or insertion of a catheter through which we can administer an anesthetic substance continuously by a pump under solute left in place for 24 to 48 hours after surgery. The effect of the anesthetic substances can last 24 hours. When the block effect dissipates, you gradually begin to be in pain again. Do not wait to be very ill to ask for analgesia.

Risk of nerve block (very rare):

- Bleeding, hematoma (bruise-blue region);
- Damage to the nerve;
- Infection;
- Intoxication used drugs (local anesthetics).

This procedure is safe and the benefits outweigh the risks. In all cases, your anesthesiologist will explain the procedure and you will have the opportunity to ask all the questions you want.

Before Surgery

- We will shave you if necessary
- We start an intravenous line (IV)
- We insert a urinary catheter
- We arrange you on your back on the operating table.
- We disinfect the region that will be operated on. We cover your entire body with sheets except for area of your surgery.
- The anesthesia that was agreed upon with your anesthesiologist will be administered. It is possible that all of this will be initiated in another room before you enter the operating room to minimize the time you spend there.

During your surgery you will be under the constant surveillance of an inhalation therapist, an anesthesiologist, nurses, your surgeon and the rest of the surgical team.

After Surgery

- You will receive oxygen either with a facial mask or a nasal tube.
- We will put dressing on the knee that has had surgery.
- We will make sure that the movements of your new knee joint are working correctly and that the prosthesis is stable.
- We take x-rays to make sure that there are no complications after the surgery.

You will then be taken to the **recovery room**.

Recovery Room

This is the place where your side-effects from anesthesia and surgery will begin. You will be monitored constantly by a specialized nurse.

- The nurse will take your vital signs (blood pressure, pulse, and breathing) and your general state and your dressing will be checked regularly.
- The nurse can administer medication via your IV for pain and/or nausea and itching. Don't hesitate to ask for what you need.

You are also under the care of your anesthesiologist until you are stable and ready to return to your hospital room in the orthopedic unit.

Your surgeon also supervises your case and receives updates and will be called should you have any problems resulting from your surgery.

Your stay in the recovery room depends on your recovery from the anesthesia used during surgery. Return to your room will be decided by the anesthesiologist.

Going to your Room

You will be going to your room in the same bed you are in. The nurse will take your vital signs (blood pressure, pulse, and breathing) based on established protocols. Your health status, your IV line, your oxygen, your dressing, your drain (if you have one), your urinary catheter, your mobility and the sensitivity will be evaluated by your nurse.

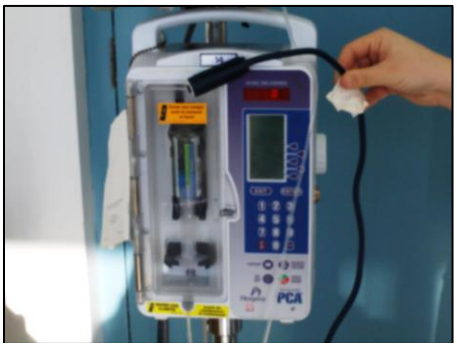
Pain Management

The pain you will feel after your surgery is normal. Pain can manifest as a burning sensation, sharp pains, twinges or pulling and/or pressure at the operative site and can vary from one person to another

Many medications and methods of relaxation exist to mitigate pain. Our goal is that you experience the least amount of pain and discomfort possible. To achieve this you must be involved in the process because you are the only one who knows the levels of pain and discomfort you are experiencing. Do not hesitate to discuss what you are feeling with your nurse. Here are some treatments that can be offer to you.

It is possible that your anesthesiologist will prescribe a patient controlled analgesia (PCA) pump.

1. **PATIENT CONTROLLED ANALGESIC PUMP** (PCA)



- It's a pump that is programmed by your anesthesiologist that contains medication to control pain. When you feel the pain you can push a button that will administer drugs via your IV.

- This pump is programmed to give you doses of medication at safe intervals and only when you ask. It's very safe. There is no risk of addiction or over-medicating because **you are the only one who is pressing the button.** You are the only one who knows the level of pain you are experiencing.

- The administration of the drugs from this machine is not painful as it uses the IV line that was installed before you went to surgery.

- You will give yourself medication when you need it. You can't give yourself too much because the pump is programed to only dispense medication on a fixed interval prescribed by your anesthesiologist based on many factors such as your weight, your level of health, the medications you take regularly etc.

- The pump emits a special sound when it administers a dose of painkillers after you push the button. It emits a different noise when it is too soon for another dose.

- The doses administered are small ones that need to be taken regularly to give you good pain relief. Don't wait until your pain gets really intense because you risk not having the relief you need. **You are the one in charge of your PCA pump. No one else is authorized to press the button for you.**

- Advise your nurse if the level of pain relief is not high enough or if you have secondary effects such as nausea, vomiting or itching. Steps will be taken to relieve these undesirable symptoms and other medications and/or modifications to you pain medication will be done with the advice and permission of your anesthesiologist.

2. Pain Killers Either by Injection or in Pill Form

Starting from the first day, it is important to take your medication very regularly instead of in conjunction with certain activities. If you let the pain become too intense, it is very difficult to control your pain even with medication. When you suffer, you move less and your knee might ankylose (not move freely). This is why it is important to prevent severe pain.

Use the following scale to guide your intake of analgesics.

No pain	*Light*	*Moderate*	*Severe*	*Very severe*	*Unbearable*
0	***1 - 2 - 3***	***4 - 5***	***6 - 7***	***7 - 8***	***9 - 10***

Our goal is to maintain your pain level at 3-4 or less at all times.

Keep a notebook on your night table so you can track the following:

- The types of pain medicines that are prescribed for you and the schedule for taking them.
- The time you took your medication and when you are next due.

The information you put in your notebook will help you to keep a regular schedule for your medications.

So that you can:

- Note when your pain levels are better or worse.
- Control your intake of medication in relation to the pain you experience. You are the only one who knows the level of pain you feel.
- Plan your following dose with regard to keeping your pain level manageable.
- Avoid overconsumption by knowing the schedule (frequency) for taking your medication.

- Know your list of what you take. So if your pain significantly rises when you get home even though your pain killers are similar to what you took in the hospital, you know it signal an alert.

Pain control is essential so that you can do your exercises effectively and regain your independence as quickly as possible.

Your notebook is a tool to take control of you pain and develop a way to manage it when you return home. Taking pain killers reduces your vigilance and concentration. It is important to find ways to be sure to follow the important instructions relative to your surgery and controlling your medication.

Other Methods that you Can Use with Medication to Relieve your Pain Are:

- Apply ice or wrap your surgical site with a cold pack for 20 minutes every two hours and after you do your exercises.
- Do deep breathing exercises.
- Meditate and use other methods of relaxation
- Change your position regularly.
- Find distractions you enjoy.

Postoperative Exercises

Boot camp begins as soon as you return to your room!

The frequency for all respiratory exercises explained on pages 35 – 37.

Unless you have been told otherwise these exercises can be done after your return from the recovery room to your hospital room. You should repeat all these exercises 5 – 10 times once an hour.

Stop doing these exercises on the 4th day after surgery if you are not having any respiratory problems.

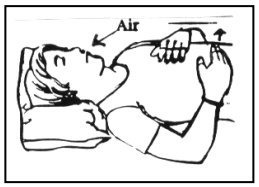
Deep Breathing Without an Apparatus

Goals

- Make you relax
- Reduce your pain
- Dislodge lung secretions more easily.

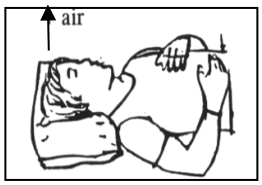
Technique

1. Stretch out on your back with your legs gently bent. Place one hand on your stomach and the other under your breasts.



2. Close your mouth. Inhale slowly and deeply with your nose. Only the hand on your stomach should rise.

3. Exhale slowly from your mouth through your lips that should remain closed. This will make you take twice (2 times) the time to exhale as it did to inhale. Exhale so that your ribcage and lungs expel all the air they can.



This exercise is not easy to do and it is essential that you practice to this before you come to the hospital for surgery.

Respiratory Exercises (Spirometry)

Goals

- Facilitates the elimination of bronchial secretions to prevent respiratory complications.
- To regain and maintain good lung expansion and increase their capacity.
- Stimulate your breathing reflex that was slowed down by the anesthetics and the analgesics.
- Promote good health and allow you to return to your usual activities.

Deep Breathing Exercises with the Spirometer Stimulation Apparatus.

Remove the apparatus from its wrapping. Attach the mouthpiece to the flexible tube and the tube to the cylindrical base.

1. Get into a sitting position.
2. Adjust the inhalation level by raising the flow selector to the correct corresponding number desired on the cursor
3. Hold the apparatus vertically in front of you, (holding it at an angle will make the exercise too easy) and exhale normally.
4. Firmly place your lips around the mouthpiece and inhale enough air to make the ball rise.
5. Inhale and raise the ball for 3 seconds, (or follow the directions given by your doctor) so that you get a good pulmonary expansion.
6. Hold this inhalation for 3 seconds (or follow the directions given by your doctor) even if the ball has fallen.
7. Then, exhale through your mouth, keeping your lips pursed. Take a few normal breaths.
8. Repeat steps 5 – 8 about 5 minutes per hour (or follow the directions given by your doctor).
9. Leave the apparatus in arm's reach so you will be encouraged to do these lung exercises.

Induced Coughing and Expectoration (Spitting) Exercises

The goal of this technique is to make you dislodge bronchial secretions that can cause pulmonary complications.

Technique

- Sit up in your bed or on a chair.
- Take 2 deep slow breaths, inhale through your nose and exhale through your mouth.
- Do the same thing for a 3rd breath, but this time hold your air while counting to 3. Cough deeply 2 or 3 times in a row without breathing in between to remove all the air from your lungs. Successive coughs allow you to more easily expel secretions than a single cough would.
- Prepare a folded towel or use your hand and hold it firmly over your wound while you cough or sneeze.

Exercises to do After Surgery

Goals

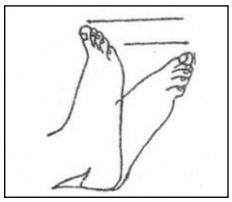
- Activate blood flow, reduce swelling and diminish the risk of thrombosis.
- Facilitate the elimination of bronchial secretions to prevent respiratory complications.
- Promote the return of the intestine's ability to remove gas.
- Promoted the return of movement to your joints, to stimulate and strengthen muscles.
- Promote good health and allow you to return to your usual activities.

Frequency

Unless you are told otherwise, these exercises can be done on the day of your surgery as soon as you wake up in the recovery room or when you recover the ability to move your feet. Repeat 5 – 10 times an hour.

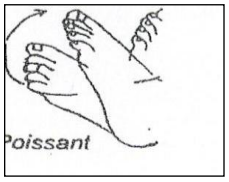
1- Circulatory[1] Exercises

Flexion and extension of the ankles (do both feet at once)
On your back, legs stretched out, point your feet toward the end of the bed and then point them at your chin. Repeat this action 30 times every 2 hours.



Rotation of the ankles (do both feet)

On your back, <u>one foot at a time</u>, make circles with your ankle. You will rotate each one first circling from left to right and then from right to left. Repeat this action 30 times every 2 hours.



1- Getting Vertical

You will be sitting up 4 hours after surgery. You will be asked to sit on the edge of your bed and put your legs out over the edge. You will be doing this maneuver with the help and under the supervision of a nurse. It is imperative that you follow the instructions you received during your pre-admission meeting regarding the way to sit on the edge of the bed. You should practice how to do this before surgery so that you can do it well after your operation. You must be actively involved in the movement.

2- The First Lift

If sitting up happened in the afternoon, the first time you stand will be that evening. Otherwise, it will be around 9 o'clock the next morning. Your first getting on your feet consists of you getting out of bed, moving a few steps with a walker, and sitting in an armchair. This will be done under the supervision and partial help of your nurse.

Generally, you will be allowed to put 100 % of your body weight on your operated leg if you tolerate it. If this is not the case, your orthopedic surgeon will specify this

[1] These exercises are taken from Paradis and Poissant

in your chart and you will be advised. The nurse will also put a sign above the headboard of your bed to advise the staff of your restrictions.

The day after your surgery you will get yourself ready for the day in the armchair with the partial aid of a staff member.

As soon as possible you should be moving around to go to the washroom with the aid of your walker. Avoid using a bedpan, a toilet chair or a portable urinal.

Do not get up and move around without the staff's permission.

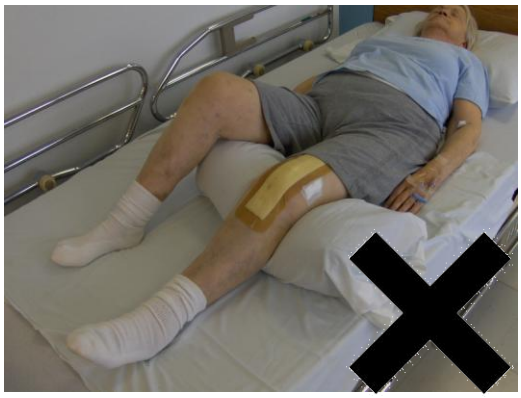
Moving around as much as possible has many benefits:

- Strengthens your lower extremity muscles and accelerates your ability to walk.
- Helps your respiratory system to return to clear and return to normal.
- Wakes up your digestive system and reduces nausea and constipation problems.
- Diminishes problems of urine retention because your bladder is stimulated by exercise. Your bladder also empties better on the toilet than in a bedpan or a portable urinal because it is a better anatomical position.

Movement in Bed

- During the first hours, the nursing staff will help you position yourself to bed if necessary;
- During the first 3 months, lying down on the back is preferable to favor the extension of your operated leg;
- You can sleep on your 2 sides with a pillow between the knees;
- You must change position regularly to prevent ankylosis and pressure ulcers;
- The foot of the hospital bed can be lifted fitted with a mechanical lever by the hospital staff, to promote drainage of the swelling by gravity while maintaining the extension of your operated leg. However, never use the electrical control of bed for mounting the footboard because it reduces the extension of your leg by lifting under the knee and can promote your knee to ankylosis.

When you are lying on your back, it is forbidden to put a pillow or cushion under your knee.



Even if the pillow relieves the pain, it is prohibited since it hinder your leg to get back is extension and promotes flexion ankyloses. This type of ankyloses is harmful for the walking, because it hinder the leg to come in extension.

Contrary to what most people think, full extension is harder to win back than bending.

If you violate this rule, it is possible that your surgeon may prescribe a brace that strength and keeps your leg extended when you are in bed. This brace is called: Universal Knee pad (''Zimmer '' splint).

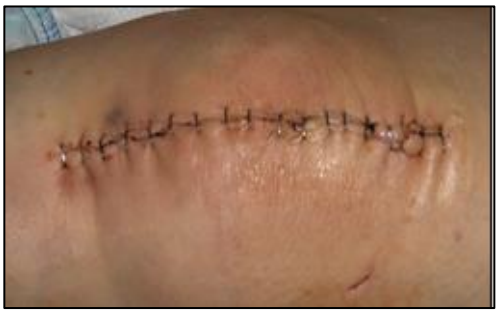
As soon as you are able to do them, practice the exercises that have been shown to you during the pre-admission and during physiotherapy session. The more you do them often, the faster you will regain your independence and a better quality of life!

NB ***It is best to do several shorter exercise sessions than 2 very long sessions and remote (see the section exercises p. 54).***

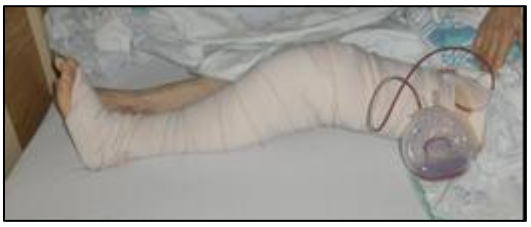
Postoperative Nursing Care

Your Wound

You will have a wound resulting from your operation. The wound is closed with metal staples or sutures and/or butterfly dressing called “Steristrips”.

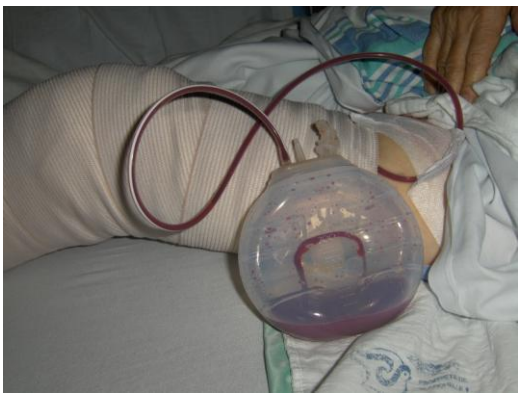


You will have a large surgical bandage that will cover the wound. It will be covered by wadding and an elastic bandage from mid-thigh to the toes. The surgical dressing will stay in place 48 hours. Thereafter, the nurse will change it to a special dressing that will remain in place without being changed until 10-14 days after surgery. Care of the wound will be treated on page 48.



Drain

During surgery, it can build up of blood in the joint that causes swelling and tension on the skin and a decrease in mobility. If necessary, your surgeon may insert a drain in the joint at the end of surgery to clear this troublesome fluid accumulation. During the first 24 hours, the staff will clear the drain if necessary and monitor the bleeding.



The drain remains in place usually 24 hours and is stopped by the nurse when no longer needed. The nurse will cover the old drain site by a dressing that will be changed as needed and left in place until the site is closed and has stopped flowing.

Function of the Urinary Catheter.

A urinary catheter is inserted when you return from surgery. Generally it is removed around 9 o'clock the day after surgery. After the nurse removes your catheter, it is important to measure your urine output when you go to the washroom. A special container for this is put on the toilet to collect your urine. You must use this until the nurse tells you it is no longer necessary.

Be advised, that the nurse will note the quantity of liquid you get by IV, and you must report all liquids you eat or drink.

NB ***These precautions are important, because they let us know that you are well hydrated, that your bladder is emptying well and that your vital organs (like your kidneys) are functioning well.***

IV, Diet and Intestinal Elimination

After your surgery, you will have an IV in place. This will allow us to assure you are well hydrated, and you will be able to receive antibiotics to prevent infections, analgesics and other fluids you need.

This IV will be removed when you can eat normally again and you don't need it for the administering of medication.

The evening after your operation, your surgeon will authorize a light diet regimen when you have regained your ability to swallow and are able to drink water. Eat slowly and pay attention to your body. Don't force yourself to eat everything. Choose easily digested foods at the beginning.

Your ability to eat food will return gradually. **Exercise** stimulates waking your digestive system and contributes to reducing nausea and constipation. It is preferable to ask your nurse for medication to speed up your intestinal activity until it returns to normal. Anesthesia and pain killers make the intestine lazy and sometimes inefficient.

Prevention Against Thrombosis (blood clots)

After surgery swelling happens at the operative site that drains with gravity toward your extremities. Immobility associated with this edema reduces blood circulation in your veins and lower extremities and can cause a blood clot that blocks your blood flow (phlebitis). This blockage can cause severe complications if it travels to your lungs (pulmonary embolism).

To prevent this problem, it is possible that you will have to administer anticoagulants by injection 2 times (twice) a day for about 28 days or depending on the specific instructions of your doctor. You must give yourself these injections starting the day after your surgery under the supervision and guidance of your nurse. It is important that you do this by yourself so that you master the technique and can do it when you leave the hospital. Don't worry, it isn't difficult and it isn't painful.

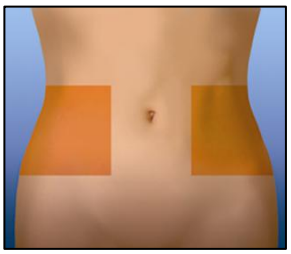
Auto-injection of Anticoagulant (if this Applies to you)

The anticoagulant is delivered in prefilled syringes by your pharmacy. No preparation is needed. When you leave the hospital, your nurse will give you a kit that contains alcohol swabs, a container to dispose of your used syringes and the first 2 doses to administer when you return home.

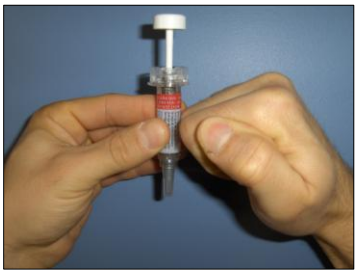
As you return home don't forget to go to the pharmacy and get your medications because sometimes there is a 24 hour delay before your pharmacy is able to deliver the product to you. The 2 first doses are given to you by the hospital to make sure that you have the medication you need immediately.

Steps for Injections:

- ❒ Wash your hands carefully to reduce the risk of infection.
- ❒ Be sure your injection site is clean.
- ❒ Comfortably position yourself. Choose a quiet place. Injections can be done sitting or lying down.
- ❒ Choose a site on your abdomen at least 5 cm or more from your belly button. The site must change every time. Hint: In the morning inject on one side of your navel and in the evening inject on the other side.

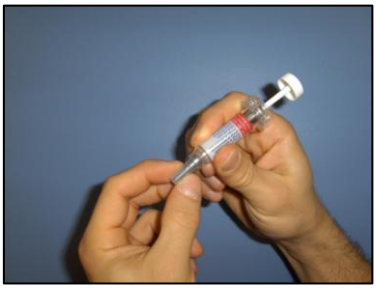


- ❒ Clean the injection site with an alcohol swab and then proceed with the other parts of your preparations, leaving the swab there when you proceed the other steps
- ❒ Hold the syringe with your non-dominant hand and position the plunger toward the ceiling (the part without the needle). Flick the barrel of the syringe with your knuckles to make any air bubbles rise to the top.



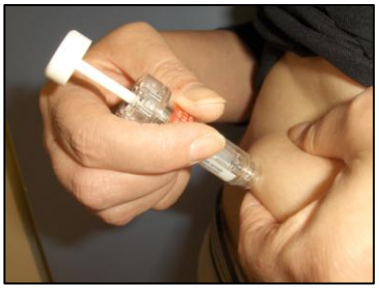
NB *This air bubble must be injected at the end of the injection, because it pushes the medication contained in the needle farther into the abdomen before you remove it. This makes sure that you get your entire dose of medication and stops some of the medication coming out with the needle.*

- ❒ Next, hold the syringe in your dominant hand. Hold it as you would a pencil. Avoid putting your finger on the plunger so that you don't push the medication out prematurely.



- ❒ Remove the cap from the needle with your other hand.

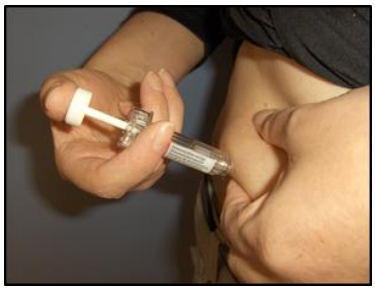
- ❒ Pinch the skin in the area you disinfected between your thumb and index fingers of your non-dominant hand and hold this until you finish injecting.



- ❒ After removed the alcohol swab, insert the needle into your skin at a 90° angle.

- ❒ Be sure to firmly keep the syringe in place and move your thumb onto the plunger without pulling-out the needle and letting go of the fold of skin you are holding with your other hand.

- ❒ Push the plunger **slowly** empty the entire contents of the syringe. When you hear the click at the end of the injection pull the needle out at the same angle you put it in.



- ❒ A protective sheath will come out so that you don't prick yourself with the needle.

- ❒ Dispose of the syringe in the container you were given. When it is full you can get another at your pharmacy or the CLSC.

Going Home (3 Days or Less After Surgery)

- You must arrange your own transportation home. Get an adult to accompany you to your home because you will not be able to drive your vehicle.

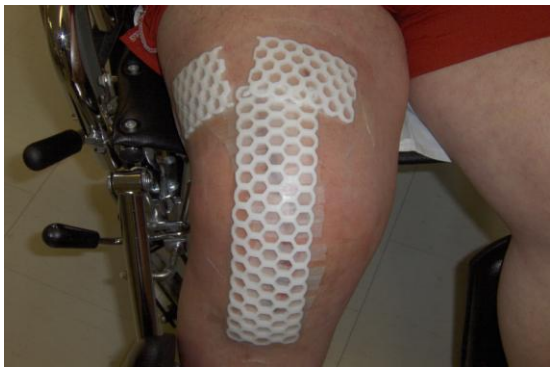
When you Leave the Hospital, we Will Give you:

- Your next appointment with your surgeon (about 4 – 6 weeks after surgery) in the Orthopedic extern clinic At this appointment you will have an x-ray of your knee and also a physical examination by your orthopedic surgeon to be sure that everything is as it should be and that your rehabilitation is going smoothly.
- Your drug prescription that you will have to fill at your local pharmacy.
- A cardboard summary sheet of what was done that you should give to your family doctor at your next visit.
- An information sheet about OPSITE® Post-Op Visible dressing.
- A certificate for medic leave from your job if you need one.
- A kit for injecting anticoagulant that includes the first 2 doses if you need it.
- Any other papers relating to your specific case.

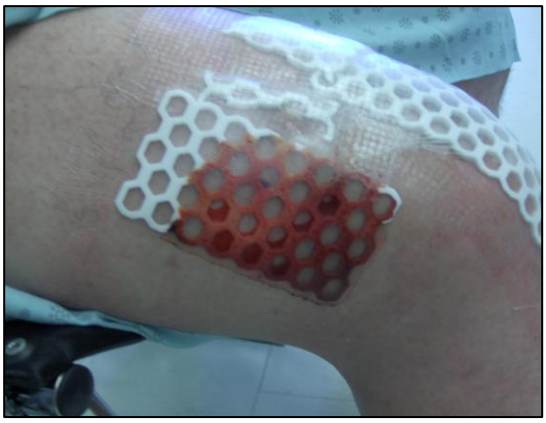
NB ***Insurance forms must be sent to the surgeon's office because there are fees involved for filling them out (see page 83).***

Your Local CLSC Will Provide Care for the First Days After you Return Home.

Care of the Wound



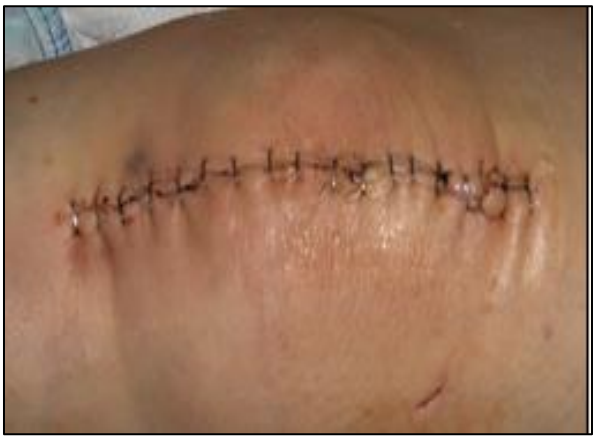
An OPSITE® Post-Op Visible dressing will be put on your wound 48 hours after surgery. It might remain in place until the staples are removed or a minimum of 10 – 14 days after surgery.



This must be changed by the CLSC if it becomes unstuck or if the holes in the dressing can no longer absorb discharges.

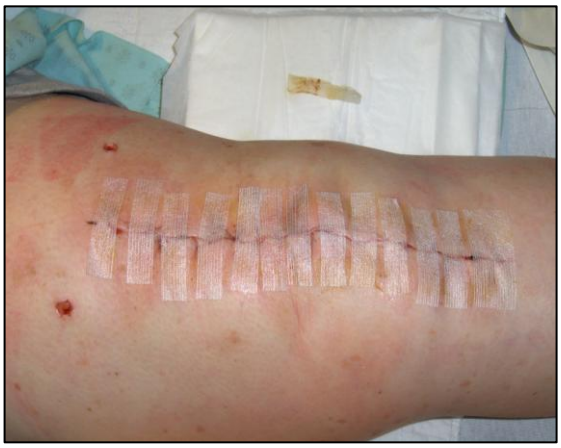
Showering is not permitted with this type of dressing even if it's considered water tight.

Don't hesitate to contact your CLSC if you need anything.



Wound with staples: You will keep the dressing on until the staples are removed. **Never leave it open to the air with the staples in place.** The CLSC nurse will remove the staples 10 to 14 days after surgery. The staples will be replaced with butterfly dressing called "Steristrips" that you will leave on until they fall off by themselves.

Wound with Steristrips and no staples: You will keep the dressing about 10 to 14 days after surgery. The CLSC nurse will give you permission to leave your wound open to the air if it is healing and has no liquid discharges. When the dressing is removed butterfly dressing (steristrips) will be put on if needed. Leave them in place until they fall off by themselves.



Wound Precautions

You can shower 48 hours after the staples come of, or according to the recommendations of the nurse who evaluated your wound after your 10th postoperative day.

Showering is not permitted if there is any discharge or openings in operative wound.

You should wash your wound gently with a gentle non-perfumed soap and rinse well with water without rubbing directly on it. Dry it by patting it gently with a clean towel.

NB ***The anti-microbial soap you used before your operations is NOT to be used because it destroys the cells that make your skin heal and irritates the wound.***

Taking a bath, going into a spa or a swimming pool are forbidden as long as the wound from your surgery is not completely healed. There should no longer be any discharges or openings. The “Steristrips” must have all fallen off by themselves.

It is important to really protect your scar from any injury for at least 4 weeks in order to avoid infections. Once the wound has no more discharges and there are no more “Steristrips” in place, you need to start massaging the scar as demonstrated on page 76.

Exercises and Physiotherapy

Continue the exercises that you were shown in the hospital many times a day. In the next 10 to 14 days after your surgery, a physiotherapist will come to your home once to be sure that you are progressing well and to assist you with certain exercises. Then, you will be told where you need to go to follow your outpatient re-adaptation program. This will last for about 6 weeks. **You must arrange your own transportation to get to there.**

If you have no one to take you to your treatments and appointments contact your CLSC. They will be able to give you information that can help you such as phone numbers for volunteer drivers.

You must be ready to pay any fees that are associated with the services you use.

NB LOOK AT THE EXERCISE SECTION and also consult the video clips at: www.cssslaval.qc.ca/orthopedie.

Signs of Complications you Must Watch for

When you return home, it is possible that certain signs that are not normal manifest.

If you need an immediate medical consultation call Urgences-Santé at 9-1-1

Consult immediately if you have:

Signs of a pulmonary embolism

- If you have chest pain
- You have difficulty breathing and you are just relaxing
- If you begin to perspire for no reason
- If you have shoulder pain when you breathe deeply

Go to the emergency room at the hospital if:

Signs of Thrombophlebitis

- If you have a permanent cramp in your calf that is made worse by physical activity or by touching and does not go away if you relax.

Pain after a fall

- You fell and since the fall, the pain increases and / or you hear a special sound at the prosthesis.

Advise the Orthopedic extern clinic
at 450 975-5569 or go to the Emergency Department if:

You start to have signs of an infection in your wound or a complication in the wound.

- The region around your wound becomes redder and redder, becomes warmer and swollen.
- The edges of your wound separate.
- There is an abnormal discharge from your wound (yellow and thick, greenish, or pus).
- You wound is giving off a bad smell.
- You have fever more than 38.5°C or more than 101°F, (temperature taken after a minimum of 30 minutes after eating or drinking) **that lasts more than 24 hours.**
- If you start to really bleed around the wound.
- You feel very strong pain at the site of your surgery similar to the pain you had the first few hours after surgery and your pain-killers do not help.

Consult Info-Santé at 811 or your family doctor for other complications that come up that you can't handle, for example:

Constipation

Constipation can be caused by a change in your eating, by reducing your activity level and by medication to reduce pain.

To re-establish regularity

- Drink at least 8 glasses of water or liquid a day.
- Eat more fiber (contained in fruits, vegetables, legumes, cereals and prune juice).
- Do more exercise, walking and exercise stimulate the digestive system.
- If you need to, take medications recommended by your nurse, pharmacist and/or doctor. There are many over the counter medications that can help for example: Colace®, Prodiem®, Metamucil®, etc.

Swelling

It is normal that your thigh and your leg swell after surgery. Most of the time, the return to normal will take between 3 and 12 months. This swelling might gently progress after exercise because you stimulate the inflammation that is necessary for healing to occur.

How to reduce discomfort related to swelling

- As soon as you wake-up and as often as possible do circulation exercises for your lower extremities (push and pull your feet and rotate your ankles).
- Do short exercise sessions, but make them more frequent.
- Apply ice to the swollen area 15-20 minutes after exercising and as you need it.
- Relax in bed with a pillow placed under your ankle. In this way you can improve your circulation with the aid of gravity. (Never put the pillow behind your knee)

Consult your family doctor, a walk-in clinic or the emergency department for any problem that makes you feel the need for medical advice.

Signs of infection other than at the operative site

Urinary Infection

- Pain when you urinate
- Increased frequency or a not normal urgent need to urinate
- Urine that smells bad.
- You have fever of more than 38.5°C or more than 101°F **which lasts more than 24 hours.**
- Abnormal urine color (milky, presence of blood).

While you wait for medical consultation drink lots of water

Lung Infection

- If you have swollen glands accompanied by painful swallowing.
- Frequent coughing, yellowish greenish secretions, shortness of breath.
- You have fever, more than 38.5°C or more than 101°F, **which lasts more than 24 hours.**

While you wait to see your doctor do the respiratory exercises you learned to clear your lungs as soon as possible with **the spirometer stimulation apparatus page 36.**

Exercises section

To recover from your surgery, you have to start the exercises as soon as possible to prevent ankylosis and stiffness caused by swelling and formation of adhesions. The blood that has accumulated in your knee during and after surgery contribute to congeal and stiffen your knee. In addition, during healing of internal and external tissue repaired during surgery, there is formation of adhesions and stiffness among patients that move less. Thereafter, it is more difficult to regain the movement, because the envelope of your joint began to heal tighter. It follows more pain to gain degrees of flexion and extension that sometimes can't be recovered without further surgery.

It is best to take the regular analgesia during the first weeks to limit the pain to its lowest possible level. It is normal to experience severe pain during the first days of exercises despite analgesia. On the other side, 20 minutes after you have done your exercises and applied ice, the pain should diminish and become light to moderate. It is not advisable to wait for physiotherapy to take analgesia. It has been proven that a patient that have been relief continuously increases its ability to do his exercises every day and thereby quickly recovers his strength and range of motion.

If you do not actively and regularly participate in your exercise, your prosthesis will not evolve well.

Manipulation of the prosthesis in the operating room

A lack of perseverance and rigor in the progression of exercises can cause the formation of adhesions and irreversible ankylosis without handling your knee in the operating room.

The orthopedist will see that complication on the clinical examination and he may decide to re-operate you. This intervention involves manipulating the prosthesis under anesthesia to break the adhesions and restore movement to the prosthesis. This manipulation leads to swelling and irritation and requires intensive exercise program to avoid a resumption of adhesions.

The surgeon then prescribed controlled exercises by a device called C.P.M. (Continuous passive motion) that is turned on 23 hours of 24 hours to a few days. When running, it fold and extend your leg repetitively at the degrees programmed by the nurse. You take breaks from the device to do physiotherapy exercises and to go to the bathroom.

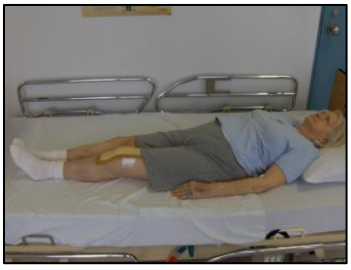
How to Move Sideways on your Back from One Side of the Bed to the Other

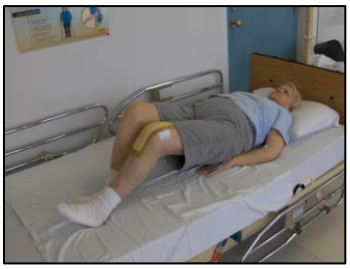
- Keep the bedhead flat or up to about 30 °;
- Bend your legs and push with them and with your arms to lift your rear end and move to the desired side. Then move your upper body using your arms to realign yourself;
- Make this movement through short distances at a time, until you have reached the desired side;
- Avoid using the trapezoid attached to the bed since you will not have one at home;
- This maneuver is similar to the exercise of the rear bridge shown later in this guide;

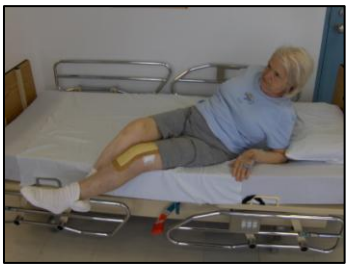
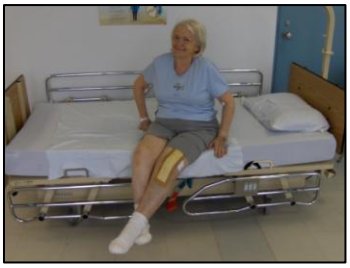
Note: Your operated leg is weak and bends less in the early days. She will improve with time and practice. You will need to compensate with your non-operated leg and arms.

Getting Out of Bed

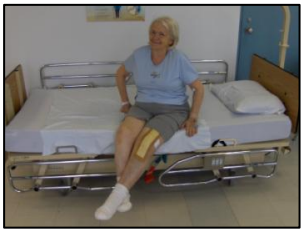
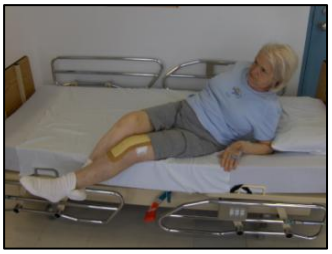
- Go to the edge of the bed by lifting your rear end and moving over (bridging your back);

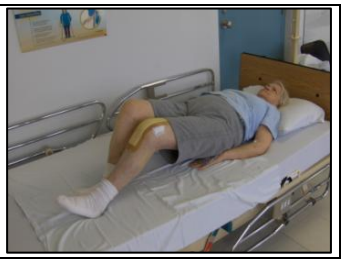




◆ Descend your legs while keeping your thighs supported with the mattress. You can do a hook with your good leg to help move and descend your other leg off the bed ◆ Sit up in bed using your arms, keeping your legs on the bed.	
◆ Seat yourself perpendicular to your bed by pushing with your hands on the mattress.	
◆ Extend the operated leg forward, the knee gently bent, ◆ Push with your arms on the mattress and your non operated leg against the floor to lift yourself of the bed.	
◆ Try to put weight on your operated leg if you can unless you have been told otherwise by your surgeon. If you have restrictions they will be noted above the headboard of your bed. ◆ When you are upright, take hold of your walker for support.	

Transfer to your Bed: Getting Into Bed

◆ Back up toward the edge of the bed with your walker until the back of your knees touch the side. ◆ Once your two legs touch the bed move your operated leg forward.	
◆ Place your hands on the edge of the bed. As you sit on the bed, control the speed of sitting using your good leg and your arms. ◆ Using your arms to help you, back up your rear end onto the bed.	
◆ While retreating, turn gradually toward the pillows to face the end of the bed.	
◆ Gradually lift your legs and be sure to maintain a good alignment of your new joint. ◆ Use your hands, or use your non operated leg as a hook. Place your good leg (foot) under the ankle of your operated leg and help lift your operated leg onto the bed.	

◆ Once both legs are in bed remove your good leg from under the operated one. Reposition yourself by lying flat on the bed. If you want to move sideways use the bridge motion you were taught (page 55).	

Transfer to a Chair

◆ Back up toward the edge of the chair with your walker until the back of your knees touch the edge. ◆ Advance your operated leg, keeping your knee slightly bent.	
◆ Change your hands from the walker to the armrests one hand at a time. ◆ Controlling your body with your arms and your good leg, seat yourself slowly at the front of the chair. Then, slide yourself backwards.	
◆ Avoid letting yourself drop into the chair.	

Transfer to Standing

- Do the opposite of “sitting down in a chair”.
- Move the operated leg slightly forward.
- Slide yourself to the front of the chair.
- Pushing on the armrests with your arms and on your good leg stand up.
- Once you are up, hold onto the walker and bring both legs to the same height.

Walking

After surgery, your will probably be allowed to put all your weight on your operated led. If you have a restriction, your surgeon will let you know. During the first days after surgery your will use a **walker.** The height will be adjusted according to how tall you are. Your physiotherapist will guide your during your first tries with your walker to be sure you are using it in a safe manner.

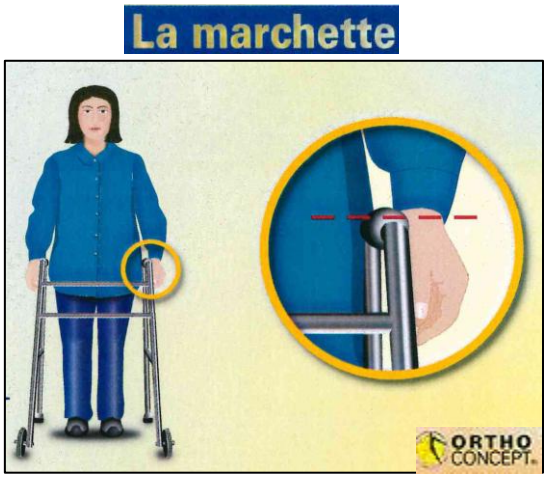
As soon as you are able to walk putting all your weight on your legs without wobbling or losing your balance your will move on to a **cane**. Again, your physiotherapist will be your resource person to help you through this step.

Adjusting the Height of a Walker or a Cane

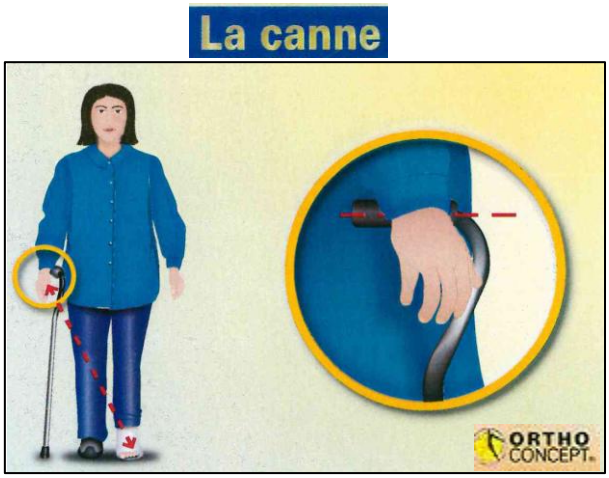
The adjustment of a walker or a cane is done in a standing position with your body straight and your feet slightly apart (the width of your hips) while wearing flat shoes.

- Stand in the center of the walker or place the foot of the cane about 15 cm (6 inches) from your foot on the opposite side of your operated leg.
- Let your arm drop along the side of your walker or cane.
- The hand supports of the walker or the cane should align with the bend of your wrist.

THE WALKER



THE CANE



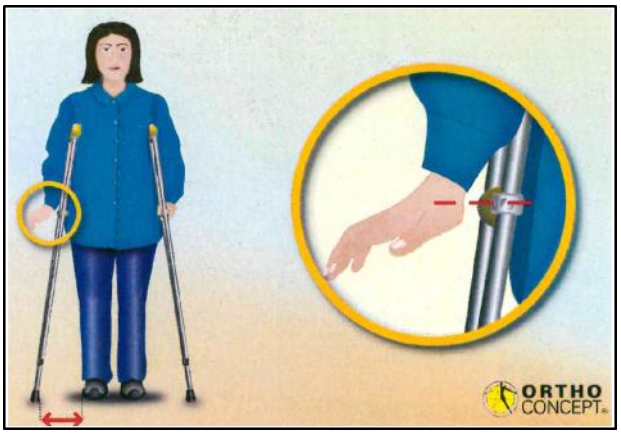
Adjustment of the Height of Crutches

Height adjustment for crutches is done in a standing position with your body straight and your feet slightly apart (the width of your hips) while wearing flat shoes.

- Place the bottom of the crutch about 15 cm (6 inches) from your foot.
- With relaxed shoulders, be sure to have about the width of two fingers between the top of the crutch and your armpit.

Finally, let your arm fall against your body. Adjust the height of the cross-bar of the crutch to be at the level of the bend of your wrist.

CRUTCHES



How to Walk with a Walker

- Slide (roll) the walker in front of you. Walk as normally as possible trying to take steps of equal length with both the operated and good side leg.
- Be sure to have your body lined-up with the back legs of the walker.
- If you move too far forward in the frame of the walker you risk losing your balance and falling backward. If your body is behind the back legs you can't support yourself properly to make your steps.

Use proper techniques. Always stand straight.
Don't lean on the walker to stand-up, use the armrests.

Non = No Oui = Yes

How to Walk with a Cane or Crutches

- You must use the cane (or the crutch) on the side opposite your operation.
- The operated leg should move at the same time as the cane or crutch.

The order for supporting yourself is the following

1. Cane or crutch
2. Operated leg
3. Good leg
4. Continue using the same order as you move (cane or crutch, operated leg, good leg, etc.)

- Be careful that you don't put the cane too far ahead of where you will step. It should be level with the foot on your operated side as you make your step.
- Try to make your steps as normal as possible.
- If you are using two crutches:

1. Use the cross-bar supports of the crutches push with your hands and push the tops of the crutches against the sides of your thorax (chest) when you move your good leg forward.
2. Advance the operated leg and the same time as your advance your crutches. The operated leg always moves when the crutches do.

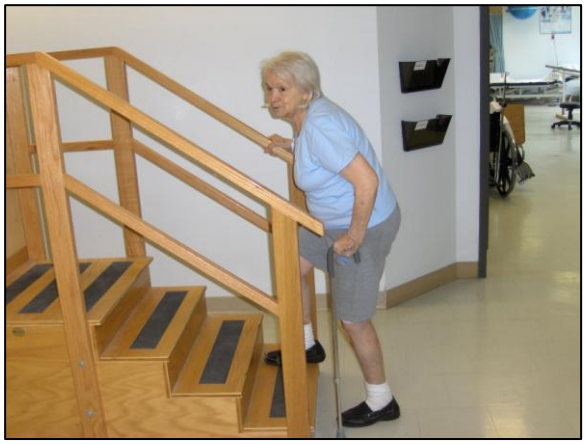
Note: Walking without aids can begin when there is no pain and you have good balance.

Stairs

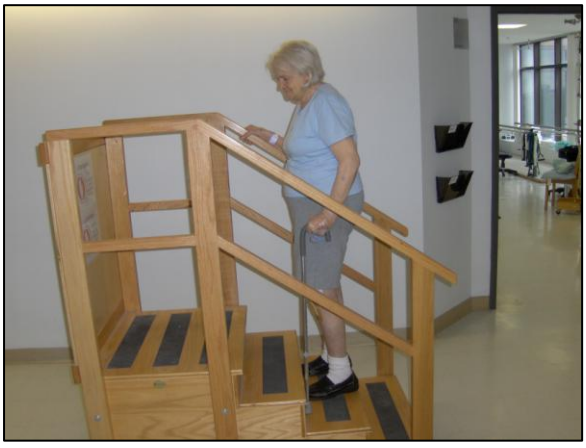
To Go Up a Staircase:

- Always use two supports
  - 2 Handrails
  - 1 handrail and a cane (or a crutch)
  - 2 crutches

- Approach the first step. Support yourself on the handrail and the cane (or the crutch), lift your good leg onto the first step.
- Then, lift the cane (or the crutch) and the operated leg onto the same step as your good leg.
- Repeat the sequence: good leg, cane (or crutch) along with the operated leg, good leg, etc.
- Only do one step at a time and the cane (or the crutch) always work at the same time as your operated leg.



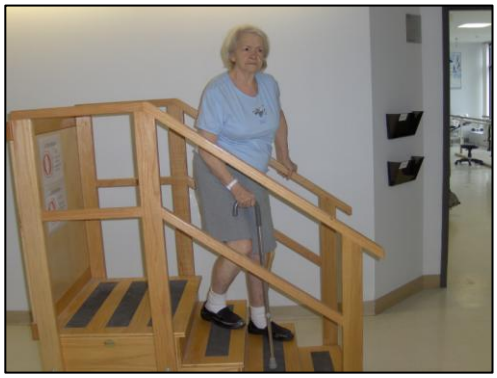
Patient operated on the left knee



Patient operated on the left knee

To go Down a Staircase:

- Always use two (2) supports :
  - 2 handrails
  - 1 handrail and a cane (or a crutch)
  - 2 crutches
- Approach the first step. Keeping your balance with the handrail and the cane (or crutches). Lower the cane first on the step. Lower your operated leg to that step
- Then bring down your good leg to the step your operated leg is on.
- Repeat the sequence: cane, operated leg, good leg to the same level, etc.



Patient operated on the left knee

Remember:

"Good legs to Heaven and Bad legs (the operated one) go down to Hell "

Transfer to the Front Seat of a Car

1. Put yourself on the asphalt of the road and not on the sidewalk (the car seat will be lower for you).
2. Open the door.
3. Move the passenger seat as far back as you can.
4. Incline the backrest all the way down.
5. Place a plastic sheet on the seat to make the surface slippery so the transfer is easier. If the seat is too low, place a firm cushion on the seat covered in plastic to make the transfer easier.
6. Get as close as you can to the door opening lined up facing your walker.
7. Stand with your back to the car and get the back of your legs to touch the car.
8. Support yourself with your left hand on the dashboard and your right hand on the back of the seat.
9. Slowly sit on the edge of the seat with your operated leg out in front of you (the same movement you learned to sit on a chair).

Figure A : points 2 - 5

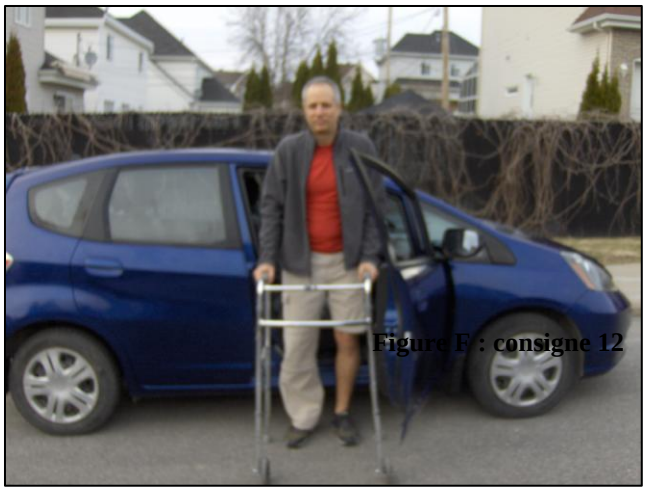


Figure F : consigne 12

Figure B : points 6 and 7

Figure C : points 8 and 9

10. Put your head in and slide your rear end as far as possible keeping your back gently leaning backwards.

Figure D : point 10

11. Bring in one leg at a time to facilitate good positioning

12. With your back is tilted backwards pivot your hips. You are allowed to bend your knee and lift your thigh with your hands to make it easier to bring your operated leg into the vehicle.

Figure E : points 11 and 12

13. Once your operated leg is in the car, you can readjust the position of the seat and backrest to a comfortable position.

14. Do the opposite to get out of the car. Start by inclining the backrest all the way down.

Figure G : point 13

Preoperative Exercises[2]

https://www.physiotec.org

Note: To view videos that demonstrate these transfers and exercises visit:
www.cssslaval.qc.ca/orthopedie

1. Ankle Mobilisation

Sitting on your bed, tense your leg and do the following movements with your ankle.

- Point your foot and pull the toes down.
- Swivel the foot so that the top of your foot turns toward the outside and then inwards.
- Rotate your ankle.
- Do both feet.

Series : 2 Repetitions : 10 Frequency : 1X / day

2. Extension

- Lie on your back
- Pull your toes toward your nose while tightening your knee and try to touch the mattress with the back of your knees.
- Hold the position for 5 seconds.
- Relax and repeat

Series : 2 Repetitions : 10 Frequency : 1X / day

3. Bridging your Back

- Lie on your back with your knees bent
- Lift your rear end of the bed
- Maintain the position for 5 seconds
- Lower yourself gently
- Repeat

Series : 2 Repetitions : 10 Frequence : 1X / day

4. Assisted flexion

- Bend your knee as far as you can by sliding your foot under the chair
- Help yourself with your other leg by pushing the front of the leg to fold away
- Hold 5 seconds
- Keep your rear well supported on the chair seat

Series : 2 Repetitions : 10 Frequence : 1X / day

5. Sitting Push-up

- Sit in a chair with armrests, your feet flat on the floor.
- Push on the armrests with your hands and lift your rear end of the seat.
- Maintain the position for 5 seconds
- Slowly and gently sit back into the chair controlling the motion with your arms.

Series : 2 Repetitions : 10 Frequency : 1X / day

Postoperative Exercises[3]

https://www.physiotec.org

Note: To view videos that demonstrate these transfers and exercises visit:
www.cssslaval.qc.ca/orthopedie

1. Assisted flexion

- Lie on your back, place a strap or towel around your ankle and hold the ends in each hand
- Bend your knee as far as you can by yourself
- Hold 5 seconds
- Then pull the belt to bend your knee more
- Hold 5 seconds and release
- Repeat

Series : 2	Repetitions : 10	Frequency : 2X / day

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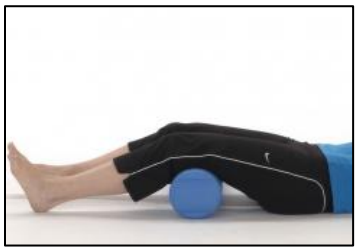
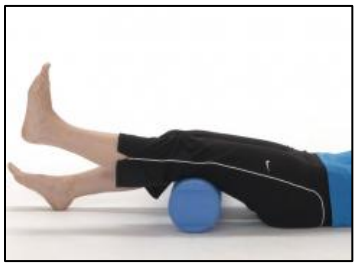
2. Quad Isometric Contractions.

- Place a rolled up towel under your ankle.
- Push your knee toward the mattress as you contract your quadriceps (thigh muscles) as you pull your toes toward you.
- Maintain the contraction for 5 seconds.
- Relax and repeat.

Series : 2 Repetitions : 10 Frequency : 3X / day

3. AA Active Extension





- Lie on your back with a rolled up towel under your knees.
- Lift your heel as high as you can without lifting your knee of the towel.
- Maintain the position for 5 seconds.
- Slowly lower the leg to the initial position and repeat.
- You can use a can of tomato juice or a coffee can wrapped in a towel to do this exercise.

Series : 2 Repetitions : 10 Frequency : 2X / day

4. Bridge

- Lie on your back with your knees bent.
- Lift your rear end of the bed.
- Maintain the position for 5 seconds
- Gently lower yourself.
- Repeat

Series : 2 Repetitions : 10 Frequency : 1X / day

5. Assisted flexion

- Bend your knee as far as you can by sliding your foot under the chair
- Help yourself with your other leg by pushing the front of the leg to fold away
- Hold 5 seconds
- Keep your rear well supported on the chair seat

Series : 2 Repetitions : 10 Frequence : 1X / day

6. Passive sitted extention

- Press your foot on a coffee table or on another chair
- Release the leg and let the knee down toward the floor
- Progress: Apply pressure with your hands or place a weight on top of the knee to stretch more

Series : 2 Repetitions : 10 Frequence : 1X / day

7. AA Active Extension

- Sit in a chair with your back firmly against the back of the chair.
- Lift your leg as high as you can towards the ceiling and try to straighten your knee as much as possible.
- Maintain the position for 5 seconds.
- Slowly lower your leg and repeat.
- More Advanced: Make the exercise more difficult by putting a weight on your ankle.

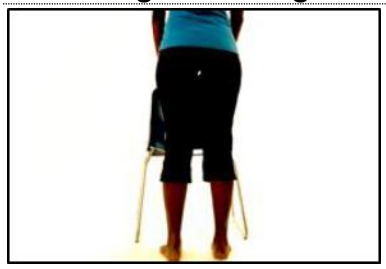
Series : 2 Repetitions : 10 Frequency : 1X / day

8. Calf strech

- Place a towel under the front of the foot.
- Pull the towel towards yourself so as to bring the toes toward the knee to a stretch sensation
- Hold for 30 seconds and repeat 3 times.
-

Series : 2 Repetitions : 10 Frequency : 1X / day

9. **Weight-bearing**



- Stand in front of a table or the back of a chair and put your hands on it.
- Transfer your body weight to your operated leg as you support yourself with your hands.
- Maintain the position for 5 seconds.
- Go back to your initial position and repeat.

Series : 2 Repetitions : 10 Frequency : 1X / day

10. Calves Strengthening

- Stand in front of a table or the back of a chair and put your hands on it.
- Using both legs lift yourself onto your toes without bending your knees.
- Go back to your initial position and repeat.

Series : 2 Repetitions : 10 Frequency : 1X / day

11. **Mini-squats**

- Stand in front of a table or the back of a chair and put your hands on it.
- Gently bend your knees as if you were going to sit down while keeping your back straight.
- Go back to your initial position and repeat.

Series : 2 Repetitions : 10 Frequency : 1X / day

12. Hamstring Strengthening

- Stand in front of a table or the back of a chair and place your hands on
- Bend knee toward buttock
- Hold 5 seconds
- Slowly descends the foot and repeat

Series : 2 Repetitions : 10 Frequency : 2X / day

Massaging your Scar

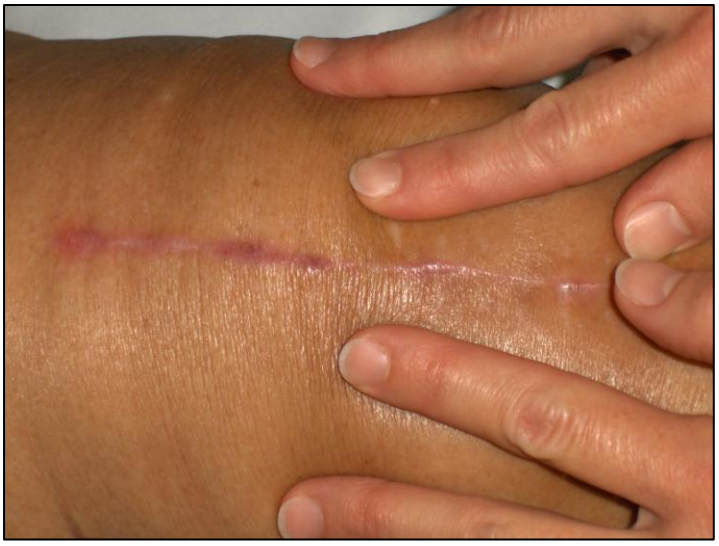
As soon as the stitches are removed and that the **scar has no scabs or seeping** (around the third week), you can begin to massage the tissues of the entire length of the scar.

Massaging the scar has several important functions:

- To encourage appropriate Collagen production.
- To make the scar stay flat.
- Helps to diminish itches and pain.
- Gives suppleness to the scar.

Place the fleshy part of your index fingers on each side of the scar and then press firmly, but comfortably, so that your fingers and skin move together. Your fingers do not have to slide on your skin or on the scar. To stretch your scar and the tissues around in all directions, do each of the following motions 10 times, 2 times a day. Slide your fingers and skin:

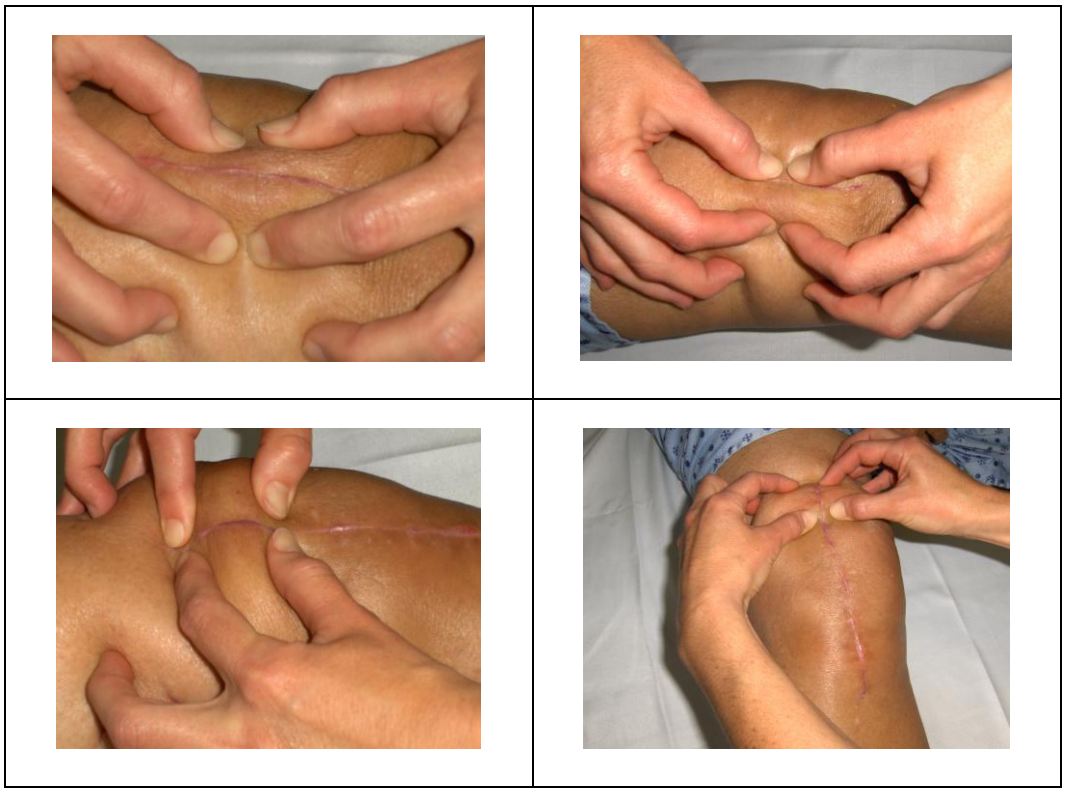
- Vertical: moving both up and down
- Horizontal: moving both left and right
- Make small circles in both directions.



Note: Be careful to not massage in two different directions as the same time to avoid splitting the wound open.

Next, place the fleshy part of your index fingers and your thumbs on each side of the scar. Push firmly but comfortably on the skin so that your fingers and your skin move together.

- Pinch the skin slowly to make a bump that raises the skin gently which will free (unstick) it from the bone and/or the muscles under the scar. Try to roll the bump upwards and downwards and then from one end to the other of the scar.



The first few days that you do these massages it is normal that the scar will react and it might lightly swell or become a little warmer. You can apply ice for 20 minutes after massage sessions to make it feel better.

Continue to massage for as long as it takes to have the scar become supple and the tissues around it return to normal. Stop massaging if pains develop or your scar does not react well: redness, thickening, becomes warmer, starts to give off fluids.

Other Precautions:

Protect your scar from the sun by using a maximum sunscreen once the scar is well healed.

Recommendation – Cold Packs

Cold is a good way to reduce inflammation and pain for your operated knee.

It is recommended that you apply cold packs for 20 minutes every 2 hours and after your exercise.

Ingredients:

- 1 cup of 70 % rubbing alcohol or windshield washer anti-freeze.
- 4 cups of water.
- 2 large Ziploc© freezer bags

What to do:

- Put the mixture into a good quality freezer bag (Ziploc© is recommended), seal it
- Insert this bag into a second freezer bag
- Remove as much air as you can from both bags and be sure they are well sealed.
- Freeze.

Application :

- Cover the bags with a pillow case to avoid direct contact with the skin.
- Apply on the skin.
- After use, return the cold pack to the freezer for the next session.

Warning

This preparation stays very cold and does not freeze into a block. It should never be placed directly on the skin because it can cause burns to your skin from the cold.

Permitted Activities (convalescence)

Progressively return to your activities. Pay attention to your energy level and the restrictions outlined in the exercise sections. Review the section “Arranging Your Living Space” on page 13. When you return home for daily activities such as hygiene and getting dressed be conscious of your limits and respect them.

Driving a Car

- You may drive your car as soon as your reflexes return to the same level you had before the surgery. Your physiotherapist can provide exercises that will speed up your ability to return behind the wheel.
- You must have stopped taking analgesics (pain reduction medication) at least 24 hours beforehand.
- You do not need a permission letter from your doctor. You need to fulfill the requirements of the La Société de l’assurance automobile du Québec (SAAQ).
- The SAAQ specifies in its documents that: “to drive safely, a person must be able to turn the steering wheel completely in both directions be able to use all controls in a car with ease, precision and quickness especially in an emergency situation when many simultaneous actions may be required.”
- Generally a minimum wait of 6 weeks is required if you need to use the operated leg.

Returning to Work

- Your return to work depends on the type of job you have.
- Your surgeon will let you know the date you may return to work.
- A medical leave certificate will be issued if you ask for one.

Insurance forms are only filled out in the private office of your surgeon (see page 83).

Alcohol Consumption

Alcohol should not be consumed while you are taking narcotic pain killers because it amplifies some of their negative side effects (sleepiness, coordination is diminished and respiratory difficulty). Once you have stopped taking narcotics for 24 hours you may consume alcohol in moderation.

Sexuality After Surgery

You can have sexual relations about 4 to 6 weeks after surgery, when you feel ready and comfortable.

Travelling, Customs and Insurance

It is normal that the metal detectors at Customs will ring. You do not need to carry a medical letter indicating you have a knee prosthesis. Just mention it to the Customs Officer who will note the presence of metal in your knee using different devices and/or if necessary by looking at your scar. Before traveling, check with your insurance company to be sure you are covered in case of problems as you travel. The majority of insurance companies require a period of 3 months without travel. From a medical standpoint, after 6 weeks, if you have had no complications, your orthopedist will allow you to travel without special precautions.

Sports

Most sports are permitted and can be reintegrated gradually as strength and movement capability return. Once your wound is completely healed (about 3 week postoperatively) swimming is a recommended sport provided that you do respects the restrictions you have for the first 3 months. Your physiotherapist may recommend a stationary bike as a mobility exercise. After 3 months other activities can be resumed depending of your tolerance and evolution (ex.: bike, golf, bowling, boules, etc.)

Sports such as jogging, jumping, karate and racquet sports (squash, tennis, etc.) should be avoided whenever possible because the repetitive stress to your prosthesis will reduce the lifespan of your new knee.

Activities with a high risk of falling or collision and team sports such as soccer, volleyball, hockey and aggressive skiing are high risk for prosthesis breakage and should therefore be avoided.

Dental Work and Other Medical Interventions that Put You at Risk of Infection

If you have an infection in on part of your body, some of the bacteria will spread through your blood stream and can infect your knee prosthesis. It is important that you advise all medical professionals that you have a knee prosthesis before they perform interventions that have a risk of infection. They will prescribe a preventative antibiotic for you to take before they proceed. **This measure is recommended for the rest of your life.** The interventions covered by this notice are:

- Dental treatments that make you bleed;
- Endoscopic examinations (camera to evaluate the bladder, intestines, etc.);
- Lancing of an abscess (skin infections);
- Any surgery related to an infection.

NB ***The doctor who treats you must prescribe an antibiotic before the treatment.***

Lifespan of the Prosthesis

The lifespan of your prosthesis depends on many factors such as your age, body weight, activities, the stress you put on the prosthesis and the reactions of your body to the new knee. If you are careful it can last for your lifetime. If your prosthesis presents problems in the future, a revision surgery may be considered, depending on many factors, including your age.

Watch your weight. A healthy balanced diet helps maintain a healthy weight. **Being overweight contributes to the premature wear of the prosthesis and reduces its lifespan.**

Available Resources

For all emergencies call 911

Info Santé – CLSC call 811
24 hours a day, 7 days a week

Pre-admission Clinic.....450-975-5566

Orthopedic Nurse Navigator .....450-668-1010 # 24840

Link Nurse.....450 668-1010 # 24532

Extern Orthopedic Clinic
(Between 8:00am and 3:00pm) 450 975-5569

Day Surgery Unit Surgical Care
(Between 7:00am and 10:00pm) .....450 668-1010 # 23549

Orthopedic Care Unit 5th South-West .....450 668-10110 # 23474

Private Offices of the Orthopedic Surgeons...……...450 668-3840

1555, boulevard de l'Avenir, suite 310, Laval (Québec) H7S 2N5

Other Important Intervention People

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_____

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_____

Significant People

_____

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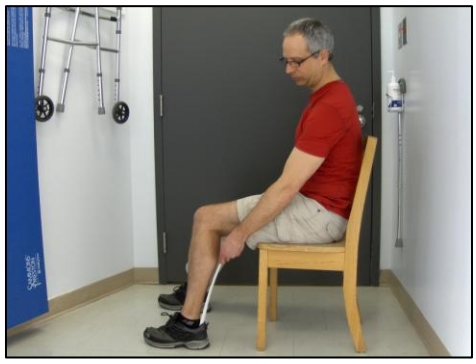
List of Recommended Equipment

For your safety:

- ❒ Keep a cell or cordless phone with you all the time.

To get dress:

- ❒ Reaching tong (26 inches);
- ❒ Long handled shoe horn (26 inches);
- ❒ Sock-aid
- ❒ Loose clothes. Pants or shorts with an elastic waistband.
- ❒ Easy to put on safe shoes that attach with elastic laces or Velcro



For Bathing:

- ❒ Long handled bath brush
- ❒ Anti-skid carpets in the bathtub and shower
- ❒ Shower telephone
- ❒ Adaptations for the bathtub and shower suggested by the health professionals.

For the toilet:

- ❒ Raised toilet seat, with or without armrests.
- ❒ Easy to reach toilet paper so you can avoid forbidden movements.

For Walking:

- ❒ Walker with 2 wheels in the front (and skis in the back if you have carpeting). Do not use a 4 wheeled walker
- ❒ Cane.

For Car Transportation:

- ❒ A cushion about the same size as the car's seat and around 4 inches thick to make the seat higher.
- ❒ A plastic bag to cover the cushion and make it easier to slide, as you enter the vehicle.

For Your Care:

- ❒ Prepare the cold packs described on page 77 (70 % rubbing alcohol or windshield wiper fluid, 2 large size Ziploc© freezer bags), to bring down inflammation.
- ❒ Thermometer to check if you have fever.

Other things:

Preoperative Preparations

- ❒ Identify one or more people who could help you out after surgery if you need it.
- ❒ Create a list of phone numbers that you will need when you go home (pharmacy, grocery store, snow removal, volunteer transportation, etc.).
- ❒ Prepare your home according to the guidelines presented on pages 13 to 16.
- ❒ Plan your transportation for entering and going home from the hospital, your medical appointments, extern physiotherapy, etc.
- ❒ Advise the nurse navigator at 450 668-1010 extension, 24840 or Preadmission if you will be staying at a different address after your surgery (ex. going to your daughter's house) so that we can make sure that you get the services from the CLSC in that area.
- ❒ Prepare your suitcase using the list on page 88.

The Days Before Surgery

- ❒ At least 2 weeks before surgery stop smoking.
- ❒ Stop all natural supplements and medications at least 7 days before surgery.
- ❒ For all other medications other than Acetaminophen follow the recommendations given by Preadmission.

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- ❒ Do not shave your leg for at least 7 to 10 days before surgery and for at least 3 weeks afterwards.

48 Hours Before Surgery

- ❒ Stop drinking alcohol.

- ❒ You will receive confirmation of the date and time you must come to the hospital for your surgery.

- ❒ Be sure that you have your walker and raised toilet seat and all other things you need. If some of those things are being provided by the CLSC, it's time to go pick up your articles. You must absolutely have all things you need before you leave the hospital.

- ❒ If you have an infection or a problem, communicate with Preadmission without delay at 450 975-5487 to postpone your surgery.

The Eve Before Surgery

- ❒ There is no shaving or taking an enema before this surgery.

- ❒ Remove all make-up, false nails and nail polish from your fingers and your toes.

- ❒ **Starting at midnight until your surgery, you cannot drink (not even water), nor eat, nor chew gum, otherwise your surgery will be canceled.**

The Day of the Surgery

- ❒ Take the following medications with a swallow of water.

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Diabetes medications should not be taken because you are fasting.

DO NOT TAKE ANY MEDICATION WITHOUT THE AUTHORIZATION OF THE HEALTHCARE STAFF.

- ❒ Remove all metal jewelry and objects.

- ❒ Take a shower with the special soap and put on freshly laundered clothing.

- ❒ Do not put on any perfume, cream, powder, make-up or any other artificial substances.

- ❒ If you are putting your hair up or tying it back, use elastic without any metal.

- ❒ Don’t forget to put the last articles asked for on your packing list (medication, cards, etc.).

- ❒ Don’t forget your suitcase and report, accompanied to the hospital at the time Pre-admission assigned you.

- ❒ Present yourself at the assigned time at RC-5 (Glassed-in counter situated to the left of the main entrance of the hospital. From there, you will be told what to do and where to go.

What to Put in the Suitcase you Bring to the Hospital?

- ❑ Personal care products (toothpaste, toothbrush, hairbrush, soap, deodorant).
- ❑ Cases clearly identified with your name containing your glasses, contact lenses, dentures or other things you need.
- ❑ Practical loose clothing (shorts with an elastic waist, baggy pants with an elastic waist)
- ❑ Easy to put on shoes (Velcro closures or elastic laces) and safe flat shoes that are closed with backs and are large enough and adjustable to accommodate swollen feet, with skid resistant soles, and arch supports and shock absorption. No “flip-flops”.
- ❑ Dressing aids (shoe horn, sock aid, dressing stick or gripper),
- ❑ Box of tissues.
- ❑ **NOTEBOOK AND PEN OR PENCIL**.
- ❑ The Spirometer that was given to you at the group meeting.
- ❑ The Pre-admission guide (write contact information for resource people inside it).
- ❑ Blue hospital card and your Medicare card.
- ❑ Medications (in their original containers), pumps, and an up-to-date list of all your medications (ask your pharmacist to give you this list).

⇨ **Do not take your medication once you are in the hospital without the authorization of the nursing staff.**

⇨ **Pack your personal effects into a small compact suitcase that can be stored in a small restricted space.**

ATTENTION

Do not bring flowers, decorations, useless objects, expensive jewelry or valuable objects with you.

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Page for Personal Notes

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