

YOUR KNEE REPLACEMENT SURGERY

Total Knee Replacement (TKR) or
Unicompartmental Knee Replacement (UKR or PKR)



This booklet was developed by the *Enhanced Recovery After Surgery (ERAS®)* committee of the Centre intégré de santé et de services sociaux (CISSS) des Laurentides in collaboration with the Nursing Department, the Professional Services Department, the orthopedists, the anesthesiologists, and the Multidisciplinary Department as well as a patient partner.

It is provided to every patient undergoing knee replacement surgery (TKR-UKR).



IMPORTANT!

This booklet was designed for educational purposes.

It in no way replaces the advice of a healthcare professional and is not a substitute for medical care.

Do not hesitate to contact a healthcare professional for any questions about your health.

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This booklet is to help you properly prepare for your knee replacement surgery. Your involvement in this process is the key to success.

The advice in this booklet is for information only. The professionals involved in your treatment will give you personalised information tailored to your needs.

In addition to your surgeon's expertise, playing your part is essential to the success of your surgery and recovery. The more prepared you are, the greater your chances of success.

Preparing yourself mentally and physically for surgery is an important step. Do not hesitate to ask questions and to find out more about your procedure, your hospital stay and your return home. Those are excellent ways of addressing fears and putting your mind at ease.

Read this booklet regularly, before, during and after your hospital stay.

Bring it with you to all your appointments.





**Understanding
your procedure**

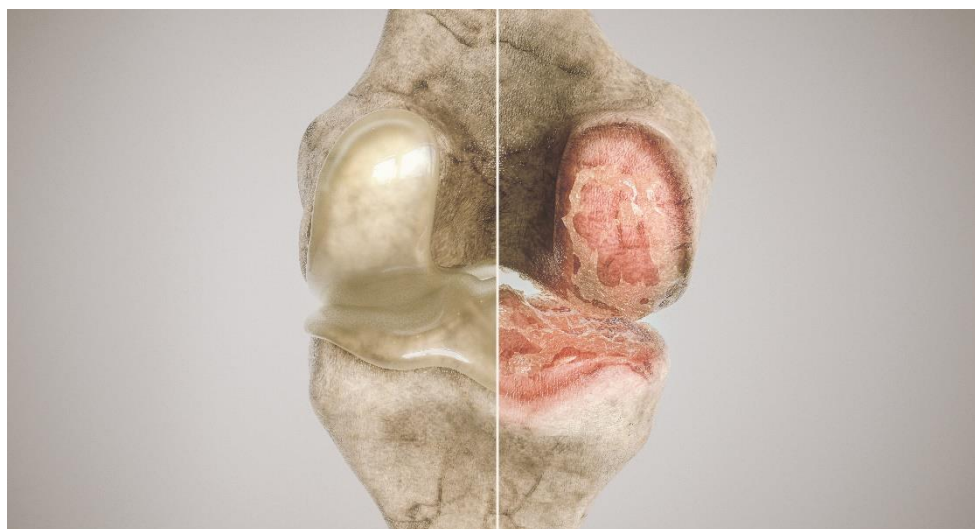
Knee replacement surgery

Knee replacement surgery is a procedure to replace the painful and damaged articular surfaces of your knee with plastic and metal artificial parts. Generally speaking, knee replacement surgery is recommended when conventional treatments (medication and exercise) fail to relieve pain and to improve joint function.

The knee joint has three articular surfaces: the femoral, tibial and patellar (kneecap) surfaces. The femoral and tibial surfaces are the most likely to be damaged, as they bear your body's entire weight. Your orthopedic surgeon may decide to also replace the patellar (kneecap) surface, depending on your diagnosis.

The femur is the bone in your thigh that connects to your knee, where it articulates with your tibia (shin bone).

Source : Bigstockphoto



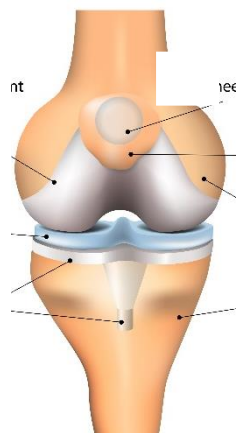
Healthy knee

Knee with arthrosis

Your prosthesis

Your knee prosthesis meets four objectives:

1. To eliminate or reduce pain when other treatments are no longer effective.
2. To improve joint mobility.
3. To improve your ability to carry out your daily tasks independently.
4. To ensure joint stability or to correct a deformation.



Full prosthesis



Unicompartmental prosthesis



Source : Bigstockphoto

The lifespan of a prosthesis depends on several factors (medical, surgical and personal), but 80 to 100% of patients still have it 15 to 20 years after surgery.

Effects of the surgery

In general, after your recovery you will be better able to walk and will have less pain than before your surgery. The exercises and the strength you will gain from your rehabilitation will enable you to gradually resume the activities you love while avoiding the risk of impacts or torsion in your new knee. Do not worry, there are practically no contraindications after this surgery.

Results of your knee replacement will depend on the state of your muscles and bones, and your joint mobility. These aspects vary greatly according to your pathology and age.

Overall, 1 to 3 months after surgery you will be able to resume usual daily activities. Physical activities can resume 2 to 3 months after surgery. Returning to work is possible 3 to 6 months after surgery, depending on the type of work.

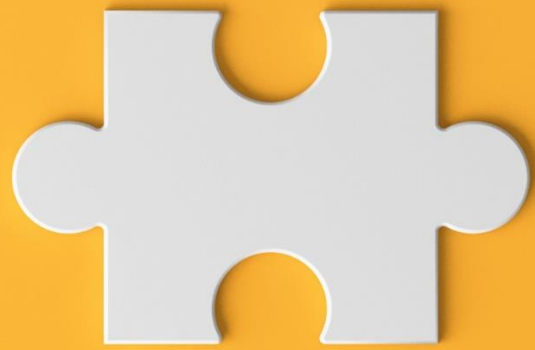
Several professionals (nurses, a physiotherapy professional, doctors) will help with your rehabilitation and as you resume your daily activities. Other consultants (e.g., a social worker and a nutritionist) will visit you, if necessary, while you are hospitalised.

The first time you get out of bed, unless told otherwise, you will be able to put as much of your weight as you can bear on your operated leg. It will be normal for you to feel pain, nausea, and stiffness in the operated knee.

Managing your pain will be key to your recovery. Though normal, your pain will increase when you move around and do the exercises but should not be so intense as to prevent movement. You will notice the pain gradually easing as the days and weeks go by. After a week, it should have diminished significantly and be under control. Any stiffness in your operated knee may be due to the presence of blood, to inflammation in the surrounding tissue and to the healing process underway. You may experience fatigue due to physical stress, sometimes less than optimal sleep and blood loss during surgery.

Some patients will experience constipation. This is predictable and due to reduced mobility and food intake after surgery, as well as taking postoperative narcotic pain medication, which slows bowel function. Maintaining your exercise regimen, practising mobility and healthy living habits (eating and sleeping) are strongly recommended during the recovery period.

Preparing for surgery



Understanding the process

Important information for your care

Your appointment with your orthopedist

- Orthopedist: Dr. _____, on _____

Your preadmission clinic appointment will be on _____

Your group pre-op appointment will be on _____

Your appointment with other specialists (if necessary):

- Internal medicine: Dr. _____, on _____
- Cardiologist: Dr. _____, on _____
- Other: Dr. _____, on _____

Important information for your surgery

Your procedure is scheduled for _____

Time of arrival at the hospital: _____

Place: _____

Notebook

During preadmission appointment

During your hospital stay

During your first appointment with the orthopedist

During your other appointments with the orthopedist

Healthcare professionals

Orthopedist: _____

Nurse clinician: _____

Nurse(s): _____

Physiotherapist: _____

Social worker: _____

Other: _____

Enter the names of the professionals you meet throughout the course of your care so that you can refer to them as needed.

Which medication to stop or continue taking?

Your surgeon or the nurse at your preadmission appointment will tell you whether to stop or continue taking your medication before your operation. Bring a list of your medication to your appointments.

Stop taking¹:

- _____; stop _____ days before surgery
- _____; stop _____ days before surgery
- _____; stop _____ days before surgery

- **Anti-inflammatories** (e.g., Ibuprofen, Advil®, Motrin®, including children's, Celebrex®, Maxidol®, Aleve®, Naprosyn®, etc.)
_____; stop _____ days before surgery

- **Natural health products** (glucosamine, omega 3, vitamin E, etc.)
_____; stop _____ days before surgery

To be taken on the morning of your surgery:

¹ You can take medication such as acetaminophen (Tylenol®, Tempra®, etc.) until midnight the night before your surgery.



Diet

Maintaining or reaching a healthy weight will make your exercises easier and will protect your joints. You will find it easier to move around and to resume your daily activities. A healthy diet can speed up recovery after surgery and helps prevent postoperative complications. Eat three balanced meals a day based on the Canada Food Guide. Drink plenty of water every day, especially on the days before your procedure, to maximise hydration at the time of surgery (1.5 to 2 litres a day), unless you are under a fluid intake restriction.

Also be sure to consume an adequate amount of protein to promote healing.

Which foods are rich in protein?

- Dairy products (milk, yogurt, cheese, etc.)
- Eggs
- Soy drinks
- Legumes, beans, peas, lentils
- Nuts and seeds
- Meat, poultry, seafood, fish
- Supplements such as Ensure[®] and Boost[®]

Prevent or treat anemia:

Temporary anemia caused by blood loss during or after your operation will require an increased intake of iron during your convalescence to rebuild your red blood cells. You can start a diet rich in iron from now.

Animal (hemic) iron (meat, poultry, fish) is better absorbed in your body than plant (non-hemic) iron (green vegetables, whole grain products).

To improve the efficiency of absorption of plant iron, include the following in the same meal:

A source of vitamin C (orange, kiwi, strawberries, broccoli, cantaloup, tomato, fruit or vegetable juice).

Avoid coffee and tea at mealtime as they interfere with the absorption of iron.

Examples of sources of iron:

	Hemic iron	Non-hemic iron To be taken with Vitamin C
Excellent sources	Pork, lamb, poultry or beef liver, lamb kidneys, clams	Baby cereals (such as pablum)
Very good sources	Heart, oysters, mussels, beef and pork kidneys, blood sausage, veal liver, horsemeat	Whole grain breakfast cereals (e.g. rich in fibers such as oats, barley, whole wheat, etc.)
Good sources	Beef, turkey, dark meat, pork, lamb, veal, fish, tongue, liver pâté, veal kidneys, shrimp, scallops, eggs	Various nuts and seeds, legumes, tofu, enriched cream of wheat, oatmeal, bread, pasta, spinach, baked potatoes with their skins, broccoli, beans, sweet potatoes, dried fruit, greenstrap molasses

Alcohol

Alcohol consumption can affect your hospital stay.

We recommend that **several weeks before surgery you reduce your alcohol consumption to a minimum.**

Ideally, you should avoid alcohol consumption for 1 week before your operation.

Alcohol, anesthesia and analgesics can interact.

Resources to help you reduce your consumption are available at <https://www.quebec.ca/en/health/advice-and-prevention/alcohol-drugs-gambling/alcochoix-plus/>



Tobacco

It is better to reduce or even stop smoking before an operation. Tobacco increases the risk of complications and increases the time needed to heal. Don't hesitate to ask your doctor or pharmacist to prescribe products to help you quit smoking.

We strongly recommend that you quit smoking 6 to 8 weeks before the surgery.

Healthcare professionals are available to support you during every step of the quitting process.

Many free resources are available to help you:

- The I Quit helpline: 1-866-527-7383 (toll-free) or <https://tobaccofreequebec.ca/iquitnow/>;
- Quit Smoking centres: 1-844-440-AIDE (1-844-440-2433)
** Without absolutely quitting, they can help you feel better during your stay;
- <https://www.santelaurentides.gouv.qc.ca/sante-publique/prevention-et-promotion-de-la-sante/tabagisme/> (French only).
Contact your CLSC if you are out of our territory.
- L'Association pulmonaire du Québec lung association: 1-888-768-6669 (toll-free) or <https://poumonquebec.ca/en/>



If you have not stopped smoking a few weeks ahead, stop at least 24 hours before your procedure.



Physical activity

Surgery is stressful for the body. This is why a key to successful outcomes is to be physically fit before surgery. Exercising before surgery can help you improve your stamina, muscle strength, posture, balance and cardiac health. It may help you recover more quickly after your procedure. Continue exercising if you already do or start gradually with a type of exercise that interests you.

Stress management, positive thinking and restorative sleep

Stress has negative impacts on your health, your immune system, your cardiorespiratory system, and your general state of mind. It is crucial to know how to relax your body and calm your mind. The benefits of positive thinking will allow you to better control your emotions, to slow your breathing, to relax any tension in your muscles and to reduce your anxiety before surgery. We recommend that you make your preparations several days ahead of your surgery to enable you to be fully rested on the day of your procedure.

See the “Exercise Program” section of this booklet for relaxation instructions.

Planning your return home

Plan your return home so that everything is arranged when you are discharged from the hospital:

- Make sure you have all the necessary equipment at home to maximise your autonomy when you are discharged (walker, cane, other equipment recommended during your group appointment).
- You may need help with meals, grocery shopping, laundry, housework and getting to and from your appointments after surgery.
- Talk to your family and friends about getting help when you go home after your surgery.
- Find a grocery store that offers home delivery or telephone or online orders.
- Buy or prepare meals ahead of time that you can freeze and reheat in the microwave.
- Find a pharmacy with home delivery service.
- Plan for your home maintenance during your recovery, e.g., for lawn-mowing in summer or snow removal in winter.
- Find someone to care for your pets.
- Depending on your surgery, it is possible that you will not be able to drive for 6 to 8 weeks. Make arrangements for your trip home after your hospital stay and for your appointments. See the “Community Resources” section of this booklet for a list of community groups that offer this service.

Your escort

Ask **one** person you know to accompany you to appointments and to help you at every stage of the surgical process, from preparing for your procedure to recovering from your operation (always the same person).

Plan for your ride home, which will require your escort (an adult) to accompany you. Tell your nurse if you have any concerns about going home.

Your escort will act as your trainer, motivator and support as well as your memory-aid. This person will also assist you as needed during the first few days after your return home. Their presence at your side will gradually diminish as your condition and needs evolve.

If your mother tongue is neither French nor English, it is all the more important that you be accompanied by someone you trust.

Name of the person who will accompany you: _____

Your escort will not be allowed in the OR nor the recovery room. When your operation is over, we will tell the person that they can join you in your room, the surgical care unit or the day surgery unit, depending on the policies in force.

Surgery



Preadmission

You will have a preadmission appointment with a nurse, who will tell you how to prepare for surgery and what to expect during your hospital stay. The nurse will determine which of your medications you can continue to take and which you must stop taking before surgery.

You will need to get a blood test and maybe some other tests. You may be asked to consult other professionals (e.g., an internal medicine specialist, etc.) depending on your surgeon's assessment.

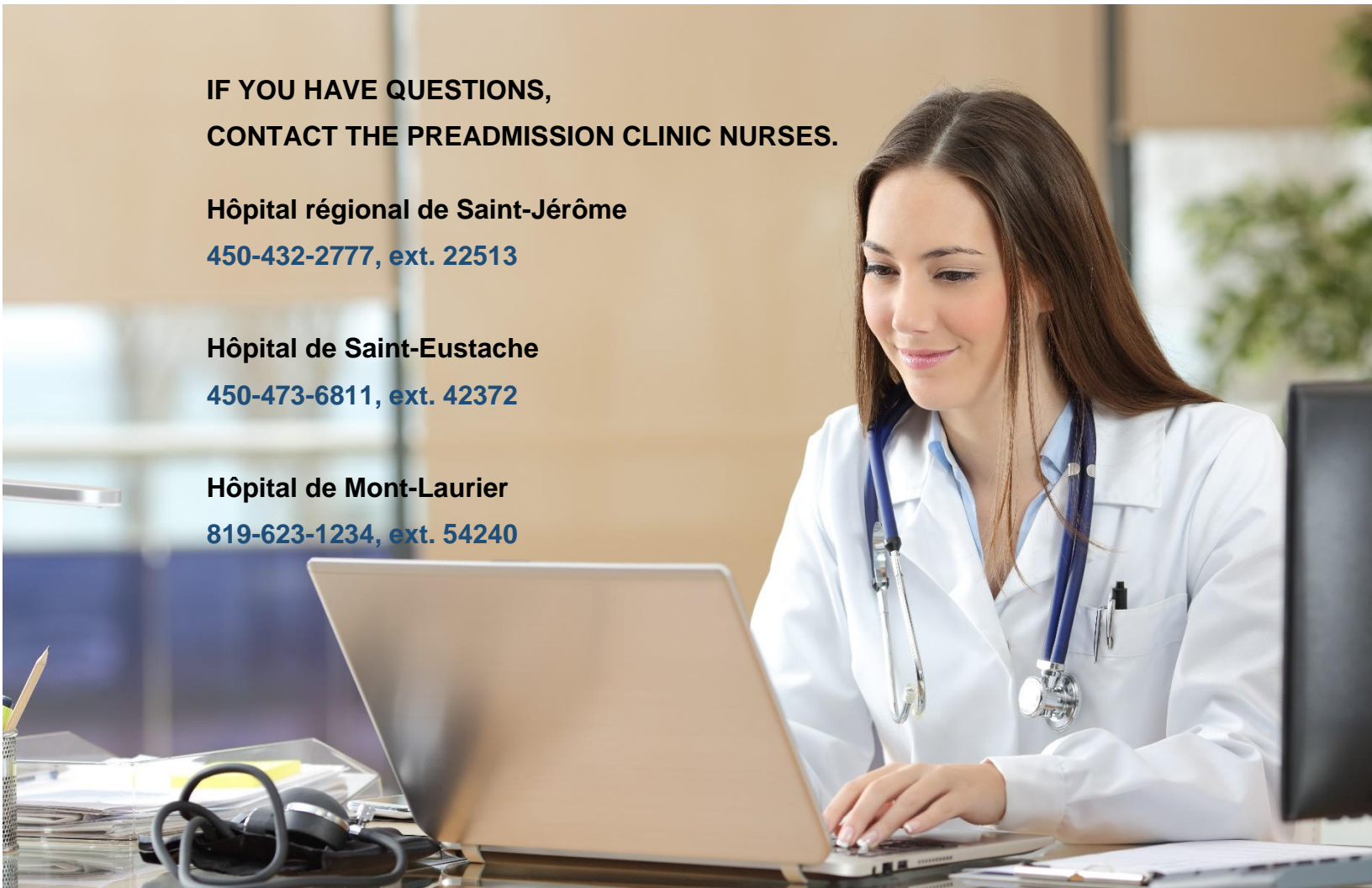
You will also take part in a group meeting with a nurse and a physiotherapist. You will be given information on your operation, and on your limitations and the exercises to do after your operation.

**IF YOU HAVE QUESTIONS,
CONTACT THE PREADMISSION CLINIC NURSES.**

Hôpital régional de Saint-Jérôme
450-432-2777, ext. 22513

Hôpital de Saint-Eustache
450-473-6811, ext. 42372

Hôpital de Mont-Laurier
819-623-1234, ext. 54240



Confirming your surgery

You will receive a call from your hospital advising you of the date set for your surgery. You must arrive according to the instructions you will be given, keeping in mind that the time of your surgery is not definitive.



The surgery can take place before or after the scheduled time. It could also be cancelled due to an emergency. If that happens, your surgeon will reschedule your procedure as soon as possible.



If you are ill, have an infection, are pregnant, have been in contact with someone with a contagious disease (e.g., chickenpox) or unable to come to the hospital for your surgery, call us as soon as possible at the number for the hospital where you are to have your operation.

The day before surgery

Hygiene and diet

1. Wash your hair with shampoo and your face with your usual soap.
2. Shower with your usual soap or a chlorhexidine-based soap, whichever the nurse or your surgeon recommends.
3. Wash yourself from the neck down, taking care to wash your navel, with a Q-tip if necessary, and your genitals.
4. Do not shave the area to be operated on.
5. Wear clean pyjamas to sleep.

From midnight on, you can drink one of the following clear liquids: water, filtered apple juice, sweetened sports drinks such as *Gatorade*, black coffee or tea (with **no** dairy or substitute). **We recommend that you choose a sugared drink to create an energy reserve.**



Do not eat, chew gum or drink liquids other than those mentioned above.



You must **stop smoking** at least 24 hours before the operation if you have not already done so.



Preparing your personal effects

- This information booklet.
- Any other information brochure you have been given.
- Your valid health insurance and hospital cards.
- Your medication, in their original containers, pumps or insulin.
- An up-to-date list of your medications (ask your pharmacist to provide you with one).
- Spirometer, if you received one during preadmission.
- Housecoat, anti-skid slippers, ample and comfortable clothes.
- Toiletries (tissues, toothbrush, soap, etc.) if you are going to stay overnight at the hospital.
- Other personal effects (cane, hearing aid, eyeglasses, container for dentures, CPAP device if you have sleep apnea).
- Attestation for leave from work, if needed.
- A few dollars in case of need.
- Books, magazines, or a cellphone with ear pods to listen to music if you like.

THE HOSPITAL IS NOT RESPONSIBLE FOR LOST OR STOLEN ITEMS.

We urge you to leave valuables at home.



The morning of your surgery

- Shower the same way as the night before your surgery.
- Do not apply cream, perfume or make-up.
- Remove any nail polish or false nails.
- Remove any wig, hairpiece or false eyelashes.
- Remove any jewelry, including piercings.
- Do not shave the area to be operated on. Nursing staff will shave you if necessary.
- If you ordinarily use contact lenses, do not wear them. Wear your glasses instead.
- Wear clean, ample, comfortable clothes.
- You can brush your teeth before leaving home.
- You can drink one of the following clear liquids between 5:00 AM and 6:00 AM:
 - Water
 - Filtered apple juice
 - Sugared sports drink like *Gatorade*®
 - Black coffee or tea (without dairy products or substitutes)

We strongly recommend that you choose a sugared drink to create an energy reserve.

We encourage you to **drink 1 to 2 cups** of one of these liquids.

You can no longer have a drink after 6:00 AM.

Arriving for surgery

On the day of your surgery, go directly to the unit you were told to when the hospital called to confirm your surgery.

Arrive at the scheduled time.

If there are any changes, we will let you know.

The day surgery nurse will:

- Ask you to put on a hospital gown.
- Show you where to store your personal effects.
- Fill out a preoperative checklist with you.
- Take blood samples or examine you, depending on your doctor's requirements.
- Ask you whether you followed the instructions for your preparation.
- Administer oral medication to prevent pain and nausea after surgery.

Before leaving for the OR:

- Remove your glasses.
- Remove your underwear and jewelry if you have not already.
- Remove your dentures or hearing aid.
- Urinate.



Going to the OR

A patient attendant will take you to the OR. There you will meet your anesthesiologist (the specialist who will ensure your safety and comfort during the operation) to discuss the type of anesthesia you will be given.

In the OR, an intravenous catheter (small tube) will be inserted into a vein to give you fluids and medication during surgery.

You will be prepped for surgery by disinfecting the site of the procedure.

Your body will be covered with sheets except for the site of the procedure.

At every stage of the operation, a respiratory therapist, an anesthesiologist, nurses, your surgeon and their assistants will monitor you constantly.

The duration of the operation will depend on the type of surgery and on the specific procedure your condition requires. In general, a regular operation lasts on average one hour.

Types of anesthesia

When you arrive in the operating room, you will be given an IV.

It is important for your anesthesiologist to know your state of health and your medical history. Remember that all the questions you will be asked have a single goal: to choose the type of anesthesia that will best suit you, to ensure your safety and the greatest wellbeing possible.

The anesthesiologist will explain the choice of anesthesia and of pain medication possible post-surgery. Together you will decide which you will get. Following is a general explanation of the types of anesthesia. It will be discussed with you and adapted to your state of health and your surgery.

What are the risks?

Serious complications are very rare in modern anesthesia. Even if we can't guarantee a zero risk, risk is minimal for someone in good health but higher for someone who is very sick. It also varies as a function of the complexity of your operation.

Your anesthesiologist will take all the precautions necessary and will ensure your safety and comfort during and after your operation.

If you have concerns, talk to your anesthesiologist who will give you additional information.

It is important to follow the instructions about eating and drinking before the operation:

- To reduce the risk of vomiting.
- For your safety, to reduce the risk of aspiration pneumonia (deposit of liquid in the lungs following vomiting leading to pneumonia).

Sedation

To help you relax during the surgical procedure, you will be injected with medications, usually intravenously. The dose of medications will be adapted to your degree of anxiety, your medical condition and the nature of your surgery.

Sedation may be combined with a local or regional anesthetic to make you more comfortable, reduce anxiety, and sometimes to make you fall asleep.

It is normal to be drowsy and dizzy during the 24 hours following your operation. During this period:

- Do not drive a vehicle.
- Do not use public transit by yourself.
- Do not drink any alcohol or take any unprescribed medication.
- Do not make any important decisions.
- Do not use any tools that require you to be alert.
- Gradually begin eating, starting with liquids.

Regional anesthesia

Your anesthesiologist will explain where the local anesthetics will be injected. These are done close to a nerve group to remove sensitivity in one part of your body. This injection will reduce some of your postoperative pain and therefore the taking of pain medication.

Neuraxial anesthesia

When you arrive in the OR, you will receive an injection in your back. This will remove sensitivity from the lower part of your body (spinal or epidural anesthesia). It is possible to “freeze” a larger area. Your anesthesiologist will explain where the injection will be made, the advantages of this type of technique, its side effects and potential risks.

You will not feel any pain and will not be able to see the operation. The anesthesiologist may also give you a sedative so that you are somewhat alert.

These techniques are very effective and safe and, in some cases, provide excellent pain relief which continues for several hours after the surgery.

After the operation, you will have a decrease in sensitivity and weakness in the “frozen” area. This is normal and temporary, don’t worry.

Itching (pruritus) following spinal or epidural anesthesia:

- Tell your nurse about this problem. She can provide you with appropriate treatment.
- If you are at home, contact your pharmacist.

Headache following spinal or epidural anesthesia (rare side effect):

- Drink lots of water if you are allowed.
- Relieve your pain with the help of prescribed analgesics.
- Lying down relieves symptoms.
- If the headache persists despite taking analgesics regularly, inform the anesthesiologist or the nurse (at home, call Info-Santé).

General anesthetic

Through your IV, several drugs will be administered to you to induce a state during which you will "sleep," feel nothing and have no memory of the operation as such.

A member of the anesthesia team will stay near you throughout the operation to control the effects of the anesthesia on your body (breathing, blood pressure, heart, etc.).

Heartburn following general anesthesia. You may feel nauseous, you can:

- Change position.
- Practise deep breathing.
- Take the prescribed nausea medication, if needed.

On returning home (if allowed according to the nurse's instructions):

- Drink a bit of water, tea or coffee.
- Wait 30 minutes.
- If you tolerate the liquid, continue with a non-fat soup and toast (if allowed).
- Gradually introduce other foods; avoid spicy foods.
- If you vomit, stop solid foods and have only liquids.

Sore throat following general anesthesia (normal side effects that will gradually disappear):

- Sore throat
- Dry throat
- Hoarse voice.

Airway congestion following general anesthesia:

- Do deep breathing exercises.
- Cough and spit.

- Do spirometry exercises if available (see the section of this booklet on breathing exercises and postoperative relaxation).

It is normal to be drowsy and dizzy during the 24 hours following your operation.

During this period:

- Do not drive.
- Do not travel alone by public transit.
- Do not consume alcohol or take non-prescribed medication.
- Do not make important decisions.
- Do not use any tools that require your alertness.

Another method

Possible in some hospitals; follow the nurse's instructions.

Music

Reduces the need for sedation. According to where your operation took place, you may be allowed to bring ear pods and your cellphone (or another device) to listen to music during your operation if you are under local or regional anesthetic. Listening to music helps relaxation, reduces ambient noise and the need for sedation.



After your surgery

Recovery room

After surgery, you will be taken to the recovery room. You will be in the recovery room from 30 to 45 minutes.

You may have:

- An oxygen mask
- Intermittent compression sleeves on your legs to prevent blood clots in your legs
- A cushion under your operated knee
- A dressing on your incision
- A control x-ray.

Your nurse will:

- Monitor your blood pressure, pulse and breathing rate frequently
- Check your incision
- Ask you if you feel any pain or nausea
- Install an oxygen mask briefly if needed
- Ask you to take deep breaths

The inpatient or day surgery unit

Your hospital stay will last from a few hours to two days, depending on the duration pre-established by your surgeon. Your aftercare will include the following:

- The nurse will monitor your blood pressure, pulse and breathing rate, and check the dressing on your incision.
- The nurse will give you the appropriate medication, such as analgesics and anticoagulants (medication to thin the blood to prevent the formation of clots) that are prescribed for you for several days or weeks following your surgery.
- Your surgeon will prescribe your usual medication.
- You will be given IV fluids or venous access, to keep you hydrated until you are able to hydrate yourself.
- You will be required to do the breathing exercises every hour.
- You will meet with a physiotherapy professional to go over the exercises, and to practise walking and using the stairs.
- You will begin mobility exercises (sitting up, getting out of bed) a few hours after surgery.
- Patients who are discharged the same day or early the following morning can eat as soon as they are hungry. A meal will be available to you in day surgery for lunch and supper. You can also bring snacks which you will keep with you, as you will not have access to a refrigerator. These must be odourless and, as a precaution, allergen-free.

Pain management

Reducing pain is an important element in your healing. If your body is stressed because of pain, you will take longer to heal, your functional abilities will be more limited, your sleep will be altered and that will affect your mood. Pain is normal for several weeks after surgery.

A feeling of stiffness in the operated joint is possible and is explained by the presence of blood, inflammation of the surrounding tissues and the healing process that is taking place.

Each person is unique when it comes to the most effective methods of relieving pain.

You will be asked to rate your pain on a scale from 0 to 10, where 0 equals no pain and 10 equals the worst pain possible and imaginable:

- **Between 0 and 3:** mild, tolerable discomfort or pain that does not prevent you from performing your activities
- **Between 4 and 6:** moderate and difficult to tolerate pain that slows down the performance of your activities and makes them difficult
- **Between 7 and 10:** severe and intolerable pain that makes it almost impossible to perform your activities

Pain scale

No pain	Minimal		Light		Moderate		Severe		The worst	
0	1	2	3	4	5	6	7	8	9	10

Here's what you can do to help reduce your pain:

- Don't wait until your pain level is too high before telling the nursing staff.
- We aim for a pain level below 4/10 or compatible with movement and tolerable.
- In addition to assessing the intensity of your pain, don't hesitate to describe it. The more accurate the assessment, the better the relief and the safer the administration of painkillers.
- Pain should not prevent you from doing your breathing exercises, coughing or moving around.
- There are other ways that can help you relieve your pain such as relaxation and deep breathing exercises. See the sections on these exercises at the end of this booklet.
- Your pain can be safely controlled. It is important to not fear analgesic medications. The risk of addiction to painkillers is very low as the doses are minimal and short-term. The pain relief provided by pills is as good as that by injection. The healthcare workers will make the best choice possible with you.
- If you have concerns for specific personal reasons, don't be shy to discuss them with your anesthesiologist, your doctor or your nurse.

Going home



Discharge from hospital

When you are discharged, someone must be responsible for your ride home because you will not be able to drive. We recommend that someone stay with you for a minimum of 24 hours after you return home.

Do not make any major decisions for the first 24 hours.

If you have any questions before leaving the hospital, do not hesitate to ask us.

During the first days, it will be important to learn to control your pain while pursuing your exercises according to your rehabilitation professional's instructions. Don't be surprised if your pain level is high in the first few days.

Be sure to stay well hydrated and to eat fibre-rich foods to promote proper elimination.

Ask about resuming your medications. In general, you will be able to resume your medication as directed by your doctor.

It is normal:

- To feel tired. Alternate rest periods and activities and gradually increase your activity level.
- To have problems concentrating. This is temporary following anesthesia and will return to normal.
- To feel emotional instability. Take it calmly, this reaction will gradually fade away.

Nursing and medical aftercare

- Before leaving the hospital, make sure you have the information for your next appointment with your surgeon, the prescription for your medication, and the information regarding removal of surgical staples on your incision, if you have these.
- If you have insurance, SAAQ, CNESST or other documents to fill out, you must send them to your surgeon's office. This may take several weeks and is subject to some fees. A nurse can give you the information before your discharge.
- If you need CLSC services, you will be given a prescription. We will tell you how to proceed.
- We may request that the CLSC provide specific home services. If so, a CLSC nurse will contact you to schedule appointments based on the requested frequency.
- If you need information once you return home, you can call INFO-SANTÉ.

CONSULT INFO-SANTÉ AT 811

- During the first days, it will be important to learn to control your pain while you go about your business.
- Refer to the next section to learn about the medications that may be given or prescribed to you.

Medication

Analgesic (painkiller)

Once at home, take the pain and inflammation medications prescribed for you. You will receive a pharmaceutical prescription with the necessary medication for your convalescence.

Take acetaminophen (Tylenol®) and the anti-inflammatory (e.g., Celebrex®) regularly for at least 7 to 14 days. These 2 molecules will keep your pain at a lower level by providing you with basic relief and allow you to do your exercises regularly.

If your pain level is moderate to severe and is not relieved by the combination of acetaminophen and anti-inflammatory, you can take a stronger medication such as tramadol to maximise your relief. Take them regularly during the first 48 to 72 hours following your surgery, then reduce the dose or space it out as the pain situation progresses. It is better to take it an hour before exercising, to reduce discomfort, and before going to bed. Follow your pharmacist's instructions.

If your pain is severe or you are not always able to relieve it, you can take a slightly stronger medication such as hydromorphone (Dilaudid®) or morphine, as prescribed.

If you are drowsy, nauseous, or have uncomfortable dizziness, reduce the dose (the pills can be cut).

If you have gastric distress because of the anti-inflammatory, quickly call your pharmacist or your doctor for recommendations.

The most common side effect is constipation. (See the "Constipation" section of this booklet for solutions.)

It is important to avoid alcohol if you are taking analgesics.

Consult your pharmacist to properly understand the adjustment of your medication or for any other related question.

If you experience severe pain that is not relieved by the medication, a new pain, or pain that gets worse:

call your doctor, Info-Santé (811) or go to the Emergency Room

Anticoagulant (blood thinner)

In addition to the pain medication, you will have an **anticoagulant** (e.g., rivaroxaban (Xarelto®), ASA (Aspirin®), enoxaparin (Lovenox®)) to take regularly. Its purpose is to reduce the risk of forming a clot that can block a vessel in the leg (phlebitis) or, more rarely, a vessel in the lungs (pulmonary embolism). It is important to begin taking them the morning after the surgery (unless otherwise instructed) and to take them for the entire period prescribed.

To be effective, this medication must be taken every day until the end of the period written on the prescription. If a dose is forgotten, contact your pharmacist as soon as possible.

Special recommendations regarding the anticoagulant

As long as you are taking the anticoagulant, avoid cuts and injuries by:

- Shaving carefully, preferably with an electric razor.
- Using a soft toothbrush.
- Cutting your nails carefully.
- Always wearing shoes.
- Following fall prevention guidelines.

Antiemetic (for nausea)

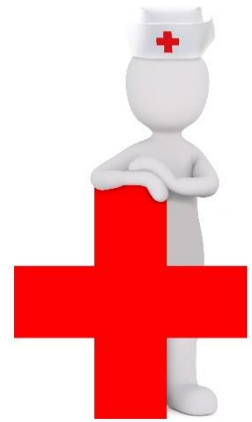
This medication, such as metoclopramide (Maxeron®) or dimenhydrinate (Gravol®), reduces nausea and vomiting which can be caused by the stress of the operation, the pain medication, or the lack of appetite in the first days. This medication is more effective if you take it 30 minutes before eating. Follow the directions provided by your pharmacist.

Laxatives (for constipation)

The stress of the operation, the pain medication and reduced mobility can cause constipation. Your surgeon may have prescribed medication such as docusate (Colace®) which softens stool, or sennosides (Senokot®) which stimulates intestinal activity. If these medications do not solve your constipation, alternatives are also available in your pharmacy such as Lax-A-Day®, Restoralax®, enemas and suppositories. Ask your pharmacist for advice. See also the “Constipation” section further on in this booklet.

When to consult

- Signs of infection in the wound (redness, pain, swelling, bad odour or increased wound discharge).
- You have chills or fever (temperature above 38.5 °C/101 °F 30 minutes after eating or drinking) for more than 24 hours.
- Heartburn or persistent vomiting.
- Numbness or the feeling of being frozen for more than 48 hours.



Signs of thrombophlebitis:

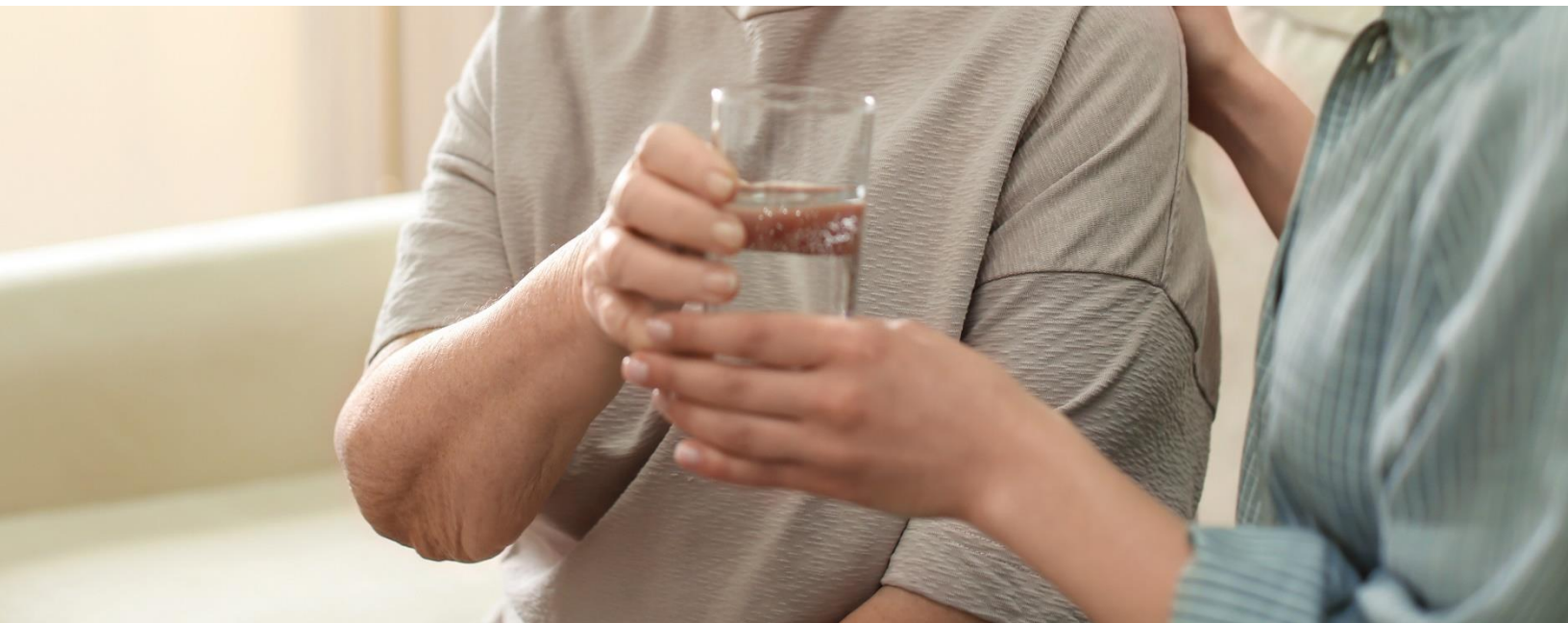
- You have persistent pain in the calf of only one leg, increased by activity or by touching the calf, with or without swelling.

Signs of pulmonary embolism:

- You have pain in your chest.
- Your breathing is difficult or wheezy or you are short of breath even at rest.
- You have unexplained sweats.
- You become confused.
- You feel a stitch in your shoulder during a deep breath.

Homecare

- When you are discharged from the hospital, follow-up appointments will be scheduled with your CLSC professionals either at your home or at the CLSC itself. This varies by territory and the services offered by your CLSC.
- The nurse will assess your pain, check your incision and remove the dressing over your incision along with the surgical staples, if you have them.
- The rehabilitation professional will assess your mobility and how you do your exercises. You will be given an adapted exercise program.



Wound care

You have a 10 to 15 cm (4 to 6 inch) incision covered with a dressing or a wound closure product (such as DERMABOND® PRINEO®) which will be removed by the CLSC nurse between the 10th and 21st day after surgery. It's important not to remove it yourself and to always wash your hands before touching the area around your incision.

Sensitivity in the area around your scar will not be the same as elsewhere for several weeks. This is normal and is caused by the cutting of small nerve networks during the surgery. Sensitivity should return to normal within a few months to a year.

If you have a wound closure product (such as DERMABOND® PRINEO®):

You can shower without having to cover it. Do not spray water on your incision or immerse it in water as in a bath or swimming pool. Make sure you gently pat it dry with a soft towel. Do not rub your incision.

Do not apply ointment, lotions, liquids or petroleum-based topical products to your incision. Do not scratch or rub the strip; this could detach the adhesive before the skin is completely healed. Any oozing or bleeding must be treated according to your healthcare professional's directions. Lint or environmental dust may accumulate on the surface of the DERMABOND® PRINEO® product, giving it a darker aspect. This does not alter its effectiveness in any way. If you notice the DERMABOND® PRINEO® beginning to slacken or come off, contact your healthcare professional.

If you have a transparent dressing like Opsite Post Op Visible® (that has cells and looks like honeycomb):

It is possible to take a shower from when you get home. Follow your healthcare professional's advice on this subject. If you take a shower, avoid spraying directly on your dressing or immersing it in water. Having water run over it is not a problem. Pat it dry, do not rub it.

If you have staples and a dressing that covers your wound:

If you have a dry dressing (that looks like cloth), you can shower providing you cover the dressing in a way that is waterproof to avoid it getting wet. Do not spray water on your dressing nor immerse your incision in water as in a bath or swimming pool. Two or three days after your staples are removed, you can wet the wound area if there is no discharge. Wash the area gently with a mild soap, rinse it well with clear water and pat – do not rub – it dry.

If you have wound closure strips:

Wound closure strips fall off by themselves. If they haven't fallen off after 10 days, you can gently remove them.

Constipation

Some patients experience constipation after surgery. This is predictable and due to reduced mobility and food intake after surgery, as well as taking postoperative narcotic pain medication, which slows bowel function. Maintaining your exercise regimen, practising mobility and healthy living habits (eating and sleeping) are strongly recommended during recovery.

Pain medication can also cause constipation.

To avoid constipation:

- Increase your fluid intake (to 7 or 8 glasses of water a day EXCEPT if your doctor instructs you otherwise).
- Eat more whole grains, fruits and vegetables.
- Go for regular walks.
- Take a gentle laxative such as Métamucil[®], Colace[®], Senokot[®] or Prodiem[®] or whatever your doctor has prescribed.
- If the situation persists, ask your pharmacist for advice. Many types of laxatives are available to help you.





Avoiding infection

Any infection in another part of your body (bladder, finger, toe, tooth, lungs, etc.) can travel through your blood and infect your prosthesis. This risk is low, but not negligible.

Do not hesitate to quickly consult your family doctor for an examination and to be prescribed an antibiotic if you have or think you have an infection.

Be sure to let your dentist or other healthcare professionals know that you have undergone arthroplasty or knee replacement surgery. A small infection can cause big problems and the healthcare professionals who are treating you know what precautions to take. It is your responsibility to keep them informed.

Contraindications

After your surgery, there are no absolute contraindications. However, the following are not recommended:

- Lifting heavy objects.
- Activities that involve impact stress on the operated joint (e.g., jumping).
- Activities that carry risk of injury (contact sports).
- Pivoting on the operated leg.



Let pain be your guide. Working in a squatting position, on your knees or on your hands and knees (e.g., washing the floor or the bathtub on your knees, gardening, kneeling, etc.) may be more difficult or not possible anymore.



Joint care

Ice

During the weeks following surgery, you should regularly apply ice to your operated knee. If your operated knee feels hot to the touch compared to your non-operated knee, applying ice will prove useful.

You can continue applying ice for several weeks.

There are various ways of applying ice:

- Apply crushed ice or a bag of frozen peas wrapped in a damp towel to the knee area for 15 to 20 minutes.
- Use a gel-filled bag or thermal pack (“magic bag”) for the same length of time. You can apply these several times a day, but you should wait 2 to 3 hours between applications.
- Get a **cryotherapy** device (cold therapy, see the “Resources” section of this booklet). You may have it during your postoperative stay. A sleeve will be put on your operated knee and connected to a device in which there is water and ice. The machine circulates water in the sleeve which efficiently cools your joint. In addition, some devices also provide compression to stimulate blood circulation. This reduces inflammation, swelling and pain, and promotes healing.



Do not apply ice if you are experiencing:

- Circulatory issues
- Discharge from your incision
- Signs of infection

Take care not to *burn* your skin by applying ice to the same area for too long.

It is normal for your leg to be more swollen (edema) for several weeks. This is usually resolved in about 6 months. Afterwards, it will have a tendency to swell more easily.

It is normal for a hematoma (large bruise) to appear near the surgical site. Due to taking the anticoagulant, it can grow until it covers your whole leg. This medication can cause mild bleeding that spreads under the skin. If this worries you, show it to your nurse or contact her. It should all disappear within a few weeks.

Use ice to reduce pain, bruising and edema.

Massaging your scar

- At first, your incision (cut) will be a little warm, red, swollen, sensitive or uneven.
- Itching and numbness are normal.
- Once healed, your scar should be flexible enough to allow a full range of movement in your knee joint.
- As soon as the wound closure product or stitches are removed and the scar no longer shows scabbing or discharge (around the 3rd week), you can begin massaging the area around your incision.

To perform the massage, you can use a small amount of unscented emollient cream or vitamin E oil. Place your index fingers beside of your scar and press firmly so that your fingers and skin move together: your fingers must not slip over either your skin or your scar. To properly stretch your scar and surrounding tissue in every direction, do each of the following movements 10 times, twice a day: up and down, side to side, then in small circles.

Next, place your thumbs and index fingers on either side of your scar, press firmly so that your fingers and skin move together:



Pinch the skin to make a small bulge, lifting it slightly off the bone or muscle.

Try to roll this bulge up and down (toward each end of the scar).

For the first few days, it is normal for the scar to react after massage by swelling slightly or becoming a bit warm. If this bothers you, you can apply ice to your scar for 20 minutes after each massage.

Continue massaging for as long as necessary until your scar is as flexible as the tissue around it. Stop massaging the scar if it does not react well, for instance if there is any discharge, thickening, etc.

Protect your scar from the sun by using a sunscreen with maximum protection factor.



**Resuming your
daily activities**

Walking safely

After your surgery, you will be allowed to put weight on your leg, unless your doctor instructs you otherwise. We recommend the use of a walker in the days following your surgery.

You will start using a simple cane, depending on your progress and the assessment of your rehabilitation professional.

Adjusting the height of your walker or cane

Adjusting the height of your walker or cane is done while in a standing position. Stand between the sides of your walker or place the tip of your cane about 15 cm (6 inches) away from your feet. To adjust the height of the handles, hang your arm alongside your walker or cane and adjust the handle to the level of the fold of your wrist.



Walking with a cane

If you use a cane, grasp it with the opposite hand to your operated leg. Walking with a cane is done in the following sequence: cane, operated leg, healthy leg, cane, operated leg, healthy leg, and so on. Take care not to place your cane too far ahead of you. It should be level with your foot (ideally the middle of your foot).

The operated leg must always follow the cane. Always take normal steps with your healthy leg.

Whichever support you use for walking, it is important not to limp. When walking, avoid stiffening your knee and turning your foot to



the outside. Promptly resume normal movement with your knee and hip, as with your non-operated side.

Normal walking without support can begin when limping and pain have subsided.

Going up the stairs

Always use 2 supports: a handrail and a cane, or 2 handrails.

Move your cane close to the bottom step, raise your healthy leg up to the first step, then bring your cane and operated leg simultaneously up to the same step, supporting yourself with both hands. Repeat this sequence for each step up, leading with your healthy leg, then bringing the cane and operated leg up to the same step, leading again with your healthy leg, etc.



Going down the stairs

Start with your cane and both feet on the same step. Lower your cane and operated leg onto the first step down, supporting yourself with both hands, lower your healthy leg onto the same step as your operated leg. Repeat this sequence for each step down, leading with your cane and operated leg, then lowering your healthy leg onto the same step, leading again with your cane and operated leg, etc.



Your physiotherapy professional will demonstrate the sequence and accompany you on your first tries. **Never use a walker in the stairs.**

Preventing falls

Falls do not only happen to other people. After your surgery, because your sense of balance may be less than ideal, it will be all the more important to give yourself every chance of avoiding falls and their undesired consequences.

- Free up space to move around by removing any obstacles from floors, hallways and stairs.
- Take your time going up and down stairs and use the handrail as long as you need to. To the extent possible, avoid carrying things up and down stairs.
- Install non-slip mats, especially in places that become slippery when wet like the bathtub and shower.
- Make sure you have adequate lighting, even at night, such as an easy-to-reach bedside lamp, nightlight, etc.
- Rearrange the furniture so that you can move around freely with your cane or walker.
- Use caution when you move around the house under medication.
- Take your time raising yourself from a lying to a sitting position and from a sitting to a standing position.
- Ask for help to reach, lift, or manoeuvre objects that are high, heavy or hard to manipulate. Place your most frequently used items where you can easily reach them without having to get up on a chair or bench.
- Keep your wireless phone near you in case of a mishap. For people who live alone, there are more sophisticated personal alert systems, but they are more costly. If the phone rings when you do not have it with you, do not rush to answer. Keep easy-to-read emergency numbers close to you at all times.
- Indoors, wear shoes or non-slip slippers. Outdoors, wear non-slip shoes or boots. In winter, you can fit your boots with special cleated soles. Do not walk on wet grass.

- To avoid mishaps, ask someone you trust to look after your pets if you are worried that they might get in your way, or get a bell for their collars to let you know where they are. Avoid having their toys clutter up the floor.
- When shopping, do not carry too many parcels. Instead, use a pushcart to transport your purchases or have them delivered to your home.
- If you have fallen in the past, try to determine what caused you to fall to avoid falling again.

Making adjustments to your home

- Remove rugs, mats, obstacles and power cords, and arrange your furniture so that you can move around freely with your walker.
- Have handrails installed on the stairs if necessary.
- Place all the objects you regularly use (in the bedroom, kitchen, bathroom, closet, laundry room, etc.) where you can easily reach them without having to use a stool.
- Plan for adequate lighting at night in the bedroom, hallway and bathroom, and have a space close to your bed where you can keep things you need for the night.

Getting onto or up from the toilet or a chair

- Back your walker up to the chair or toilet until the back of your knees touch the edge of the seat.
- Move your operated leg forward, keeping your knee slightly bent.
- Grasp the armrests of the chair or place your hands, one at a time, on the toilet seat or seat of the chair.
- Slowly lower yourself (avoid letting yourself drop) onto the chair or toilet.
- Keep your knee bent as much as possible while seated.



Your bedroom

Position in bed

- When you are lying down, it is imperative that you keep your body aligned.
- When you are lying on your back, avoid placing a pillow under your operated knee.
- Lying on your side is allowed but will probably be more bearable if you lie on your non-operated side. Place a pillow between your legs to keep your legs aligned and to feel more comfortable.

Getting into or out of bed

- Sit down on the edge of the bed the same way you would on a chair.
- Start by **leaning sideways**, supporting yourself on your arm.
- Try lifting your operated leg onto the bed. You can help yourself with your other leg (for the first few days), otherwise lift your other leg onto the bed.
- Turn onto your back if you like.

Sex

You can resume sexual activity as soon as you feel better, using a comfortable position until you are completely healed.

Dressing yourself

It is best to dress yourself while seated on the edge of the bed or on a chair. Normally, this activity is not difficult.

Hygiene

The first time you take a shower, you can either stand or sit down, depending on your physical capabilities. It is forbidden to take a bath or to immerse your incision before it is completely healed (and there is no longer any scabbing or crusting).

It is a good idea to arrange your bathroom to facilitate your return home:

- Remove the sliding doors from the bath and replace them with a shower curtain.
- Install a bath transfer bench or a bath chair in the bathtub and/or a shower seat in the shower cabin.
- Install non-slip mats inside and outside the bathtub.

- Install a hand-held shower nozzle in the bathtub or shower.
- Install support bars on the wall. Never use the towel bars or soap holder for support.

Household chores

- Be sure to do as much of the housework as possible by yourself, taking frequent breaks, to speed up your rehabilitation while saving your energy.
- For the first 6 weeks, avoid strenuous household chores such as spring cleaning, washing floors and windows, mowing the lawn or shoveling snow. Do your laundry in stages, carrying and managing small quantities of laundry at a time.

Carrying things

- For transporting objects, you can use an apron with pockets, a bag tied to your walker (avoid overloading it) or a backpack.
- Avoid carrying objects in your hands when you are moving around the house with your walker or cane.
- Keep in mind that if meal preparation or housework become too much of a challenge, there are community organisations that can help you at low cost.

When an object is out of reach

Never use a stepladder or chair to reach objects that are higher than shoulder height. To reach an object on the ground or objects that are lower than your knees, use a long-handled grabber. When you feel stronger, you can lean on a solid surface (e.g., a countertop) and pick up an object on the ground, stretching your operated leg behind you. Be careful not to stress your back.



Driving

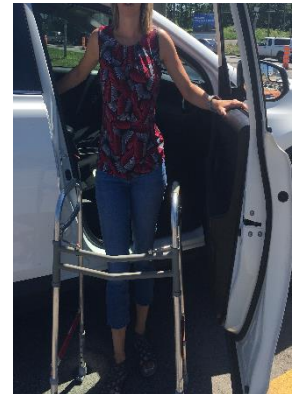
When to resume driving after your surgery depends on several factors: Which knee had the surgery? Is the transmission on your car manual or automatic? What is your general state of health since your surgery? Are you taking medication that causes impairment or drowsiness? Consult your surgeon before resuming this activity.

During your convalescence, long trips are not recommended, even as a passenger.

THE SOCIÉTÉ DE L'ASSURANCE AUTOMOBILE DU QUÉBEC (SAAQ) STIPULATES THAT IN ORDER TO DRIVE SAFELY, A PERSON MUST BE ABLE TO TURN THE STEERING WHEEL ALL THE WAY IN BOTH DIRECTIONS AND TO OPERATE THE CONTROLS EASILY, QUICKLY, WITH PRECISION, AND SIMULTANEOUSLY, IF NECESSARY, ESPECIALLY IN AN EMERGENCY.

Getting in and out of the car (front seat)

- Stand on the pavement, not on the sidewalk.
- Make sure someone has moved the car seat as far back as it will go and has lowered the seatback before you get in.
- Cover the car seat with a plastic bag to make it easier to slide in (facilitating the transfer).
- Back up to the seat with your walker, put one hand on the seatback and the other on the lowered car window or on the seat (never on the car door).
- Lower yourself onto the seat and slide back until your knees are well supported by the seat.
- Lift both legs into the car at the same time, taking care to keep your operated leg aligned.
- Once your operated leg is in, you can adjust the seatback and seat height for comfort.
- To get out of the car follow the same procedure in reverse. Begin by lowering the seatback and moving the seat as far back as it will go.



Resources



Preadmission clinics

Hôpital régional de Saint-Jérôme

450-432-2777, ext. 22513

Open 8:00 AM to 4:00 PM Monday to Friday, except statutory holidays

Hôpital de Saint-Eustache

450-473-6811, ext. 42372

Open 7:30 AM to 3:30 PM Monday to Friday, except statutory holidays

Hôpital de Mont-Laurier

819-623-1234, ext. 54240

Open 8:00 AM to 4:00 PM Monday to Friday, except statutory holidays

Cancelling an operation

Hôpital régional de Saint-Jérôme

450-432-2777, ext. 22196

Hôpital de Saint-Eustache

450-473-6811, ext. 42051; ext. 42195 if after 3:30 PM the day before surgery, on weekends or on statutory holidays

Hôpital de Mont-Laurier

819-623-1234, ext. 54240

CLSCs in the Laurentians

Main number for the region: **1-833-217-5362**

(If you need to leave a message, give your name, date of birth, municipality, and the date of your surgery).

<input type="checkbox"/> CLSC Argenteuil	450-562-3761 (equipment loans ext. 72385)
<input type="checkbox"/> CLSC Jean-Olivier-Chénier	450-491-1233 (equipment loans ext. 48392)
<input type="checkbox"/> CLSC Thérèse de Blainville	450-433-2777 (equipment loans ext. 65596)
<input type="checkbox"/> CLSC Lafontaine	450-432-2777 (equipment loans ext. 26222)
<input type="checkbox"/> CLSC des Pays d'en Haut	450-229-6601 (equipment loans ext. 77151)
<input type="checkbox"/> CLSC Sainte-Agathe	819-326-3111 (equipment loans ext. 34140)
<input type="checkbox"/> CLSC Mont-Tremblant	819-425-3771 (equipment loans ext. 34140)
<input type="checkbox"/> CLSC Rivière-Rouge	819-275-2118 (equipment loans ext. 56322)
<input type="checkbox"/> CLSC Labelle	819-686-2117 (equipment loans ext. 34140)
<input type="checkbox"/> CLSC Mont-Laurier	819-623-1228 (equipment loans ext. 56322)

CLSCs in Lanaudière

Main number for home support: **1-866-757-2572**

<input type="checkbox"/> CLSC Lamater	450-431-2881
<input type="checkbox"/> CLSC Saint-Esprit	450-839-3676

CLSCs in Laval

Main number for the integrated health / social services receptionist:

450-627-2530 ext. 64922

Info-Santé: 811

Hospitals

Hôpital de Mont-Laurier : 819-623-1234

2561 chemin de la Lièvre Sud, Mont-Laurier (QC) J9L 3G3

Hôpital de Saint-Eustache : 1-888-234-3837

520 boul. Arthur-Sauvé, Saint-Eustache (QC) J7R 5B1

Hôpital Laurentien : 1-855-766-6387

234 rue Saint-Vincent, Sainte-Agathe-des-Monts (QC) J8C 2B8

Hôpital régional de Saint-Jérôme : 1-866-963-2777

290 rue De Montigny, Saint-Jérôme (QC) J7Z 5T3

Centre multiservices de santé et de services sociaux d'Argenteuil:

450-562-3761

145 avenue de la Providence, Lachute (QC) J8H 4C7

Orthopedic clinics

Hôpital régional de Saint-Jérôme and Hôpital de Mont-Laurier

Medico-surgical clinic for the Laurentians: **450-327-2625**

Website: <https://cmcl.ca/>

Hôpital Saint-Eustache, orthopedic clinical nurses

450-473-6811, ext. 44170

Buying equipment

Check with your pharmacy whether the recommended material is available or get it from specialised outlets.

In the Laurentians:

Blainville

- ACTIMED - 519 boul. Curé-Labelle (Blainville Medical Clinic),
Suite 100, Blainville (QC) J7C 2H6
Tel: **450-434-8777**

Mont-Laurier

- MOUVEMENT SANTÉ - 452 rue Mercier, Mont-Laurier (QC) J9L 2W1
Tel: **450-778-2520 / 888-806-0198**
- CÔTÉ SANTÉ - 600 Boulevard Albiny Paquette, Mont-Laurier (QC) J9L 1L5
Tel: **819-440-2068**

Saint-Eustache

- CEO MÉDIC - 70 rue Dubois, Suite 110, Saint-Eustache (QC) J7P 4W9
Tel: **450-491-1454** / Fax: **450-491-1459**
- CENTRE ORTHOPÉDIQUE ORTHOMÉTRIX
32 rue Dubois, Saint-Eustache (QC) J7P 4W9
Tel: **450-623-3338**
- CENTRE ORTHOPÉDIQUE JULIE LAROUCHE
495 boul. Arthur-Sauvé, Saint-Eustache (QC) J7P 4X4
Tel: **450-983-7705** Website: <https://centreorthopediquejl.com/>

Saint-Jérôme

- MEDYREL INC - 379 boul. des Laurentides, Saint-Jérôme (QC) J7Z 4L9
Tel: **450-436-4921**
- CEO MÉDIC - 256 rue De Montigny, Saint-Jérôme (QC) J7Z 5P9
Tel: **450-530-9124**

Saint-Sauveur-des-Monts

- PERIPAP - 550 boul. des Laurentides, Piedmont (QC) J0R 1K0
Tel: **450-553-2023 / 1- 866-299-0998**

Outside the Laurentians:

Laval

- SOLU-MED INC. - 1607 Autoroute 440 Ouest, Laval (QC) H7L 3W3
Tel: **450-681-0033 / 877-881-0033**
- EXPOMÉDIC - 139 boul. de la Concorde Est, Laval (QC) H7G 2C3
Tel: **450-975-2299**
- ORTHO-CONCEPT
2101 boul. Le Carrefour, Suite 100, Laval (QC) H7S 2J7
Tel: **866-678-4373**
- MÉDICUS
300 boul. de la Concorde (Concorde polyclinic), Laval, (QC) H7G 2E6
Tel: **450-662-6160**

Montréal

- ADAPTEL - 2815 rue Sherbrooke Est, Montréal (QC) H2K 1H2
Tel: **514-328-1892** / Fax: **514-328-7837**
- LOCA-MÉDIC INC
4590 boul. Henri-Bourassa Ouest, Saint-Laurent (QC) H4L 1A8
Tel: **514-332-4433** / Fax: **514-332-4436**
- ORTHOMÉDIC - 3842 rue Jean-Talon Est, Montréal (QC) H2A 2Y4
Tel: **514-722-3395**
- BELPRO MÉDICAL - 1045, rue Secant, Anjou (QC) H1J 1S3
Tel: **514-353-6655** / Fax: **514-355-5554**
- CONTINENT GLOBE - 679 avenue Lépine, Dorval (QC) H9P 1G3
Tel: **514-956-0671** / Fax: **514-920-0671**

Some equipment is also available from Big Box stores (Walmart, Rona, Canadian Tire, etc.)

Renting a cryotherapy device

The advantages of cryotherapy:

- Reduces inflammation of the operated limb.
- Reduces swelling (edema) of the operated limb.
- Reduces the use of medication for pain relief.

You may have access to a device during your short hospital stay.

If you are interested in renting a cryotherapy device for your recovery at home, here are the companies that rent them. Most private insurance reimburses a portion of the cryotherapy costs which are tax deductible. Prices can vary widely from one product to another.

V-Pulse® or Polar Care Wave®

BIEN ÊTRE RAPIDE

Tel: **514-606-7233**

Website: <https://www.bienetrerapide.com/>

Available in Greater Montréal and the surrounding area.

Available in other regions of Québec through FedEx (shipping costs) and installation videoconference support on Zoom.

V-Pulse®, Polar Care Wave® or Game Ready®

CENTRE ORTHOPÉDIQUE JULIE LAROUCHE, Saint-Eustache

Tel: **450-983-7705**

Website: <https://centreorthopediquejl.com/>

Game Ready®

Tel: **1 844 441-3278** (toll-free)

Email: support@healtfaster.ca

Community resources

Lower Laurentians

Centre d'action bénévole (CAB) Solange-Beauchamp

(Solange-Beauchamp Volunteer Action Centre)

65 boul. de la Seigneurie Est, Suite 101, Blainville (QC) J7C 4M9

Tel: **450-430-5056** / Fax: **450-430-0203**

Email: info@cabsb.org

Website: <http://www.cab-solange-beauchamp.com/>

Services include transportation, community and medical accompaniment, Meals on Wheels, friendly visits

Centre d'action bénévole les Artisans de l'Aide

(Les Artisans de l'Aide Volunteer Action Centre)

184 rue Saint-Eustache, Saint-Eustache (QC) J7R 2L7

Tel: **450-472-9540** / Fax: **450-472-9586**

Website: <http://joomla.cabartisans.org/index.php/fr/>

Services include transportation accompaniment, Meals on Wheels, friendly visits

Centre d'action bénévole d'Argenteuil

(Argenteuil Volunteer Action Centre)

212 rue Wilson, Lachute (QC) J8H 3J3

Tel: **450-562-7447**

Website: <http://cabargenteuil.ca/>

Services include transportation accompaniment, Meals on Wheels

Central Laurentians

Centre d'action bénévole Saint-Jérôme Inc.

(Saint-Jérôme Volunteer Action Centre)

225 rue de la Gare, Saint-Jérôme (QC) J7Z 4Y4

Tel: **450-432-3200** / Fax: **450-432-7354**

Toll-free: **1-866-962-3200**

Website: <http://www.cbsj.qc.ca/>

Services include transportation accompaniment, Pair program, Meals on Wheels, friendly visits

Entraide bénévole des Pays d'en Haut

1013 rue Valiquette, Sainte-Adèle (QC) J8B 2M4

Tel: **450-229-9020** / Fax: **450-229-7539**

Toll-free: **1 855 226-5626**

Website: <http://www.entraidebenevolepdh.com/>

Services include transportation accompaniment, Meals on Wheels, friendly visits

Upper Laurentians

Action bénévole de la Rouge Inc.

(Léonie-Bélanger Volunteer Action Centre)

284 rue l'Annonciation Sud, Rivière-Rouge (QC) J0T 1T0

Tel: **819-275-1241** / Fax: **819-275-1700**

Email: abr@qc.aira.m

Website: <https://www.cdchl.org/action-benevole-de-la-rouge-inc>

Services include transportation accompaniment, Meals on Wheels, friendly visits

Centre d'action bénévole Léonie-Bélanger

(Rivière-Rouge Volunteer Action Centre)

610, rue de la Madone, Mont-Laurier (QC) J9L 1S9

Tel: **819-623-4412** / Fax: **819-623-3081**

Toll-free: **1-855-623-4412**

Email: info@cableonie-belanger.org

Website: <http://www.cableonie-belanger.org/>

Services include transportation accompaniment, Meals on Wheels, Pair program, friendly visits

Housing advisors

Résidence Québec

1-844-422-2555

<https://residences-quebec.ca/en/residence-advisors>

Visavie

1-855-806-3383

<https://visavie.com/en/>

Horizon du bel âge

514-949-7234

<https://www.horizondubelage.com/en/>

Agence résidences signature

1 855 561-4410

<https://residencessignature.com/> (French only)

These lists are for information only.

Some information may have changed since the last update.

Updated March 2021

<https://www.santelaurentides.gouv.qc.ca/english/>

**Centre intégré
de santé
et de services sociaux
des Laurentides**

Québec 

Your exercise program



Guidelines

Do these exercises before your surgery, during your hospital stay and when you return home. Doing them daily will speed up your recovery. Their main purpose is to help you regain your strength and mobility and to prevent circulatory, respiratory and intestinal complications. They also prevent ankylosis (stiffness) of your knee.

- Practise the exercises before your surgery to help you feel more confident about being able to do them after surgery, and to optimize your recovery.
- After you are discharged from the hospital, you will meet with a physiotherapy professional from the CLSC or the outpatient clinic to help you make progress with you exercises.
- Always keep your leg in **perfect alignment**, with foot, knee and hip properly aligned and not twisted in any way. This means keeping the leg aligned when doing your exercises, sitting down, standing up, walking, going up and down stairs, and staying seated or lying in bed.



Relaxation exercises

These promote relaxation and sleep and help reduce the intensity of pain after surgery. You can use your usual ways to relax (read, watch TV, listen to music) and do them as often as possible.

Here is a relaxation exercise you can also do:

1. Lie down on your back, arms by your sides, eyes closed.
2. Breathe in deeply through your nose and, at the same time, contract the muscles in your hands, your thighs, your calves and your feet and count to five.
3. Breathe out slowly through your mouth while completely relaxing your muscles.
4. Feel how heavy your limbs are.
5. Keep your eyes closed, breathe in deeply through your nose then breathe out through your mouth. Do it 3 times.
6. Start over from the beginning.



Breathing exercises

Do these 10 times every hour.

Begin as soon as you return to the day surgery or inpatient unit. Continue at home until you are mobile.

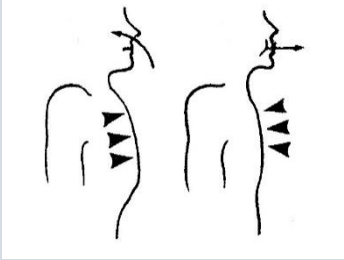
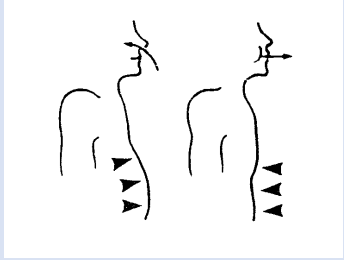
Purpose: To prevent respiratory complications and promote relaxation.



Deep breathing

It promotes relaxation and relieves pain. These are best done lying down in bed.

There are two kinds of deep breathing: thoracic and abdominal. You must do both kinds.

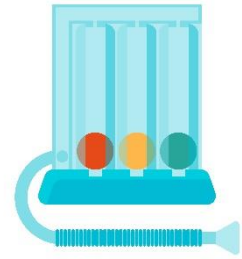
Thoracic breathing	Abdominal breathing
<ol style="list-style-type: none">1. Breathe in SLOWLY and DEEPLY through your nose (through your mouth if your nose is obstructed) inflating your chest.2. Breathe out SLOWLY through your mouth, lips pursed as if to blow out a candle.  <p>The diagram shows two side-view profiles of a human head and neck. The left profile shows the chest area with three upward-pointing arrows, indicating the expansion of the chest during inhalation. The right profile shows the chest area with three downward-pointing arrows, indicating the contraction of the chest during exhalation.</p>	<ol style="list-style-type: none">1. Breathe in through your nose or mouth, inflating your stomach. Use your hand to feel your abdomen inflate.2. Breathe out through your mouth, lips pursed as if to blow out a candle.  <p>The diagram shows two side-view profiles of a human head and neck. The left profile shows the abdominal area with three upward-pointing arrows, indicating the expansion of the abdomen during inhalation. The right profile shows the abdominal area with three downward-pointing arrows, indicating the contraction of the abdomen during exhalation.</p>

Source images : CHUS, 1986

Unless otherwise indicated, take deep breaths as soon as you wake up. During the 48 hours following your surgery, repeat the exercises 5 to 10 times each hour while you are awake. Do both the thoracic and abdominal breathing exercises each time.

Spirometry

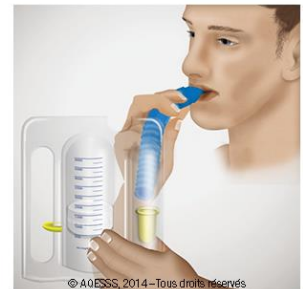
Spirometry is an exercise based on taking deep breaths and is done with the help of a device called Inspiron.



To be effective and to reduce the possibility of complications in your lungs, spirometry must be done in addition to the deep breathing, coughing and rapid mobilization exercises after your surgery.

Preferably in a sitting position:

- A)** With the nurse present, the spirometer setting level will be adjusted according to your ability. Gradually increase the level of flow to the maximum inhalation effort.
- B)** Breathe out slowly to completely empty your lungs.
- C)** Close your lips around the mouthpiece tightly and inhale deeply and slowly to raise the ball.
- D)** Hold this breath to keep the ball suspended for 2-3 seconds in order to have adequate maximum lung expansion. With each breath gradually increase it to try to hold the ball in suspension for 6 to 10 seconds.
- E)** Remove the device from your mouth. Breathe normally. Rest between the exercises.
- F)** Repeat steps B to E about 10 times every hour from when you wake up. Do it every day during the times you are awake.



Coughing and spitting exercises

Preferably in a sitting position:

- A)** Take 2 deep breaths, breathing in through your nose and out through your mouth.
- B)** Breathe in deeply through your nose or your mouth.
- C)** Hold your breath for a count of 3.
- D)** Cough hard 2 or 3 times in a row while maintaining pressure on your surgical wound, to expel all the air from your lungs and to spit out the secretions.
- E)** Rest. Repeat the exercise 2 or 3 times every 2 hours while you are awake.
- F)** Do them every day during the times you are awake.



Exercises to improve circulation

Repeat 30 times for one minute or more every hour.

Begin as soon as you return to the day surgery or inpatient unit. Continue at home until you are mobile.

Purpose: To help prevent circulatory complications and improve blood circulation.

Lying on your back, flex your feet as far back as you can toward your knees, to stretch your calves. Point your toes as far forward as possible until you feel your calves get firmer.

Do it 30 times in 1 minute or more; repeat every hour.



Lying on your back with one or both legs straight, press the back of your knees into the mattress and flex your toes back toward you, tensing your thighs and buttocks. **Repeat 10 times every hour.**



Mobility, strength, and balance exercises



After your surgery, do only the exercises that were demonstrated to you by your rehabilitation professional

Purpose: To help you recover a good range of movement, regain your strength, prevent circulatory complications and improve blood circulation.

For all the exercises you do lying down, make sure the head of your bed is completely flat (not raised in a semi-reclining position).

Do 10 repetitions of only the assigned exercises, 3 times a day.

Do each exercise slowly, without holding your breath. It is normal to feel pain for 10 to 30 minutes after you do the exercises. Take your pain medication 30 to 45 minutes before doing the exercises.

Exercise program

1. Knee flexion

Lying on your back, bend the knee of your operated leg as much as you can, sliding your heel along the mattress, without lifting your foot off the bed.

You can put a plastic bag under your foot to help it to slide or sling an elastic band or towel under your foot or over your ankle and pull it toward you with your hands to help your knee to bend.



2. Knee extension

Lying or semi-reclining on your back with one knee bent and your operated leg extended with a towel roll under your ankle, flex your foot toward you and tense your thigh muscle, pressing your knee toward the mattress.



3. Hip abduction

Lying on your back with one knee bent, move your operated leg sideways as far as possible, tensing your thigh muscle (quadriceps) and flexing your foot toward you, then slide it back to centre on the bed (without moving your pelvis). You can put a plastic bag under your foot to help it to slide.



4. Terminal knee extension

Lying on your back, bend your healthy leg and place a towel roll under the knee of your operated leg. Flex your toes toward you while lifting your heel as high as possible. Do not lift your knee off the towel (do not leave the towel in place after your exercise).



5. Straight leg-raise

Lying on your back with your operated leg straight and your other knee bent, raise your operated leg 15 centimeters (6 inches) off the bed, flexing your toes toward you and keeping your knee straight.



6. Leg press

Lying on your back with your operated leg bent, sling a towel or elastic band under your foot, holding both ends in your hands. Unbend your knee to stretch out your leg, creating resistance with the towel or elastic, then slowly bend the leg again without letting the elastic win.



7. Seated knee flexion

In a sitting position, glide your heel on the floor under the chair to bend the knee, without lifting your buttocks off the chair. You can put a towel under your foot to help your foot slide. You can use your other leg to help you slide further back. You can use a rocking chair or glider-rocker to help you to bend your knee.



8. Seated knee extension

In a sitting position, tensing your thigh muscle, straighten your operated leg as much as possible without lifting your thigh off the chair.



9. Equal weight-bearing

Standing in front of your walker or a chair, hold yourself up on both legs, back and knees very straight, weight equal on both feet, and try to not get support with your hands.



10. Standing knee flexion

Bend your knee on the operated side as much as possible without flexing your back or bending at the hip.

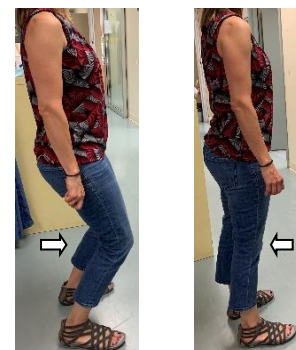


11. Standing hip flexion

Bend your operated knee by bending your hip without moving your back.

12. Mini-squat and terminal knee extension

Standing with your back straight, feet apart at the same distance as your shoulders and weight on your heels, bend your knees toward the tip of the second toe on both feet until you feel your thighs tensing, and hold that position for 5 seconds. Then straighten your knees as much as possible and hold for 5 seconds.



13. Kneecap mobility exercise

In a half-sitting position, with a small towel roll under the operated knee, hold the 4 corners of your kneecap between your thumbs and index fingers. Without pressing your kneecap against your femur, move your kneecap in the 4 directions (toward your thigh – toward your foot; to the right – to the left), holding the stretch in each direction for 3 to 5 seconds.



Repeat 10 times in each direction, 2 or 3 times a day.

www.santelaurentides.gouv.qc.ca

This booklet is available online at:

<https://www.santelaurentides.gouv.qc.ca/english/surgery/>

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