YOUR KNEE REPLACEMENT SURGERY

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



Québec 🔡

This guide is intended for anyone undergoing knee replacement surgery.

The document 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 anestheologists, and the Multidisciplinary Department as well as a patient partner.

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.

Contents

Understanding your procedure	7
Knee replacement surgery	8
Your prosthesis	8
Effects of the surgery	10
Preparing for surgery	12
Your companion	13
Preadmission	14
Confirming your surgery	15
Cancelling an operation	15
Alcohol and drugs	17
Торассо	18
Physical activity	19
Planning your return home	20
Surgery	21
The day before surgery	22
Medication to stop or to continue	25
The morning of your surgery	26
Arriving for surgery	27
Anesthesia	29
What are the risks?	29
Types of anesthetics	30
Neuraxial anesthesia	31
Another method of pain relief	33
After your surgery	
Recovery room	35
The inpatient or day surgery unit	36
Pain management	37
Going home	
Discharge from hospital	41
Nursing and medical aftercare	42
Medication (according to your prescriptions)	43
It is normal	46

Homecare Wound care Elimination and constipation Avoiding infection Contraindications Joint care Resuming your daily activities Walking safely Preventing falls Making adjustments to your home Getting onto the toilet or a chair Your bedroom Sex Dressing yourself Hygiene Household chores Carrying things Driving Getting in and out of the car (front seat) Resources CLSCs in the Laurentians CLSC in Lanaudière CLSC in Laval Info-Santé: 811 Hospitals	48 51 52 53 54 57 60 61 61 61 63 64 64
Elimination and constipation. Avoiding infection. Contraindications Joint care. Resuming your daily activities. Walking safely. Preventing falls. Making adjustments to your home. Getting onto the toilet or a chair. Your bedroom Sex. Dressing yourself. Hygiene Household chores. Carrying things. Driving. Getting in and out of the car (front seat). Resources. CLSCs in the Laurentians. CLSC in Lanaudière. CLSC in Lanaudière. CLSC in Laval. Info-Santé: 811	51 52 53 54 54 58 60 61 61 62 63 64 64
Avoiding infection Contraindications Joint care Resuming your daily activities Walking safely Preventing falls Making adjustments to your home Getting onto the toilet or a chair Your bedroom Sex Dressing yourself Hygiene Household chores Carrying things Driving Getting in and out of the car (front seat) Resources CLSCs in the Laurentians CLSC in Lanaudière CLSC in Lanaudière CLSC in Laval Info-Santé: 811	52 53 54 57 58 60 61 61 63 64 64
Contraindications Joint care Resuming your daily activities. Walking safely Preventing falls Making adjustments to your home Getting onto the toilet or a chair Your bedroom Sex Dressing yourself. Hygiene Household chores. Carrying things Driving. Getting in and out of the car (front seat) Resources. CLSCs in the Laurentians CLSC in Lanaudière CLSC in Lanaudière CLSC in Laval. Info-Santé: 811	53 54 57 60 61 61 63 64 64
Joint care	54 58 60 61 62 63 64 64
Resuming your daily activities. Walking safely. Preventing falls Making adjustments to your home Getting onto the toilet or a chair Your bedroom Sex Dressing yourself. Hygiene Household chores. Carrying things Driving. Getting in and out of the car (front seat) Resources. CLSCs in the Laurentians CLSC in Lanaudière. CLSC in Laval. Info-Santé: 811	57
Walking safely Preventing falls Making adjustments to your home Getting onto the toilet or a chair Your bedroom Sex Dressing yourself Hygiene Household chores Carrying things Driving Getting in and out of the car (front seat) Resources	58 60 61 62 63 64 64
Preventing falls Making adjustments to your home Getting onto the toilet or a chair Your bedroom Sex. Dressing yourself. Hygiene Household chores Carrying things Driving. Getting in and out of the car (front seat) Resources CLSCs in the Laurentians CLSC in Lanaudière. CLSC in Lanaudière. CLSC in Laval. Info-Santé: 811	60 61 62 63 64 64
Making adjustments to your home Getting onto the toilet or a chair Your bedroom Sex. Dressing yourself. Hygiene Household chores. Carrying things Driving. Getting in and out of the car (front seat) Resources CLSCs in the Laurentians CLSC in Lanaudière. CLSC in Lanaudière. CLSC in Laval. Info-Santé: 811	61 62 63 64 64
Getting onto the toilet or a chair Your bedroom Sex Dressing yourself. Hygiene Household chores Carrying things Driving. Getting in and out of the car (front seat) Resources CLSCs in the Laurentians CLSC in Lanaudière CLSC in Lanaudière CLSC in Laval Info-Santé: 811	62 63 64 64
Your bedroom Sex	63 64 64
Sex Dressing yourself Hygiene Household chores Carrying things Driving Getting in and out of the car (front seat) Resources. CLSCs in the Laurentians. CLSC in Lanaudière CLSC in Lanaudière. CLSC in Laval Info-Santé: 811	64 64
Dressing yourself. Hygiene Household chores. Carrying things Driving Getting in and out of the car (front seat). Resources. CLSCs in the Laurentians CLSC in Lanaudière. CLSC in Lanaudière. CLSC in Laval Info-Santé: 811	64
Hygiene Household chores Carrying things Driving Getting in and out of the car (front seat) Resources CLSCs in the Laurentians CLSC in Lanaudière CLSC in Lanaudière CLSC in Laval Info-Santé: 811	
Household chores Carrying things Driving Getting in and out of the car (front seat) Resources CLSCs in the Laurentians CLSC in Lanaudière CLSC in Lanaudière CLSC in Laval Info-Santé: 811	64
Carrying things Driving. Getting in and out of the car (front seat) Resources. CLSCs in the Laurentians CLSC in Lanaudière. CLSC in Lanaudière. CLSC in Laval. Info-Santé: 811	
Driving	65
Getting in and out of the car (front seat) Resources CLSCs in the Laurentians CLSC in Lanaudière CLSC in Laval Info-Santé: 811	65
Resources. CLSCs in the Laurentians CLSC in Lanaudière. CLSC in Laval. Info-Santé: 811	66
CLSCs in the Laurentians CLSC in Lanaudière CLSC in Laval Info-Santé: 811	67
CLSC in Lanaudière CLSC in Laval Info-Santé: 811	68
CLSC in Laval Info-Santé: 811	69
Info-Santé: 811	69
	69
Hospitals	69
	70
Orthopedic clinics	70
Service Quality and Complaints Commissioner	71
CISSS des Laurentides Users' Committee	71
Buying equipment	72
Renting a cryotherapy device	75
Community resources	
Housing advisors	79
Your exercise program	79
Guidelines	
Relaxation exercises	81

Deep breathing	. 83
Spirometry	. 85
Coughing and spitting exercises	. 85
Exercises to improve circulation	. 87
Mobility, strength, and balance exercises	. 88
Exercise program	. 89
Notebook	. 93
Important dates	. 94

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.





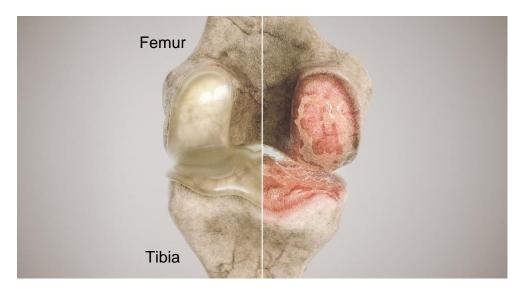
Understanding your procedure

Knee replacement surgery

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).

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.



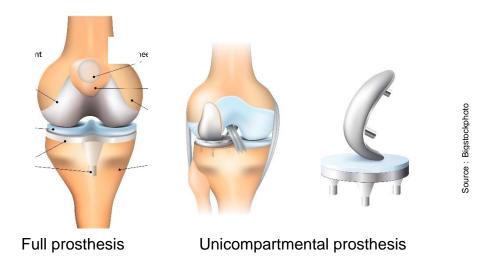
Source : Bigstockphoto

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.



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 de 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



Your companion

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 companion (an adult) to accompany you. Tell your nurse if you have any concerns about going home.

Your companion will act as your 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.

Your companion 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.

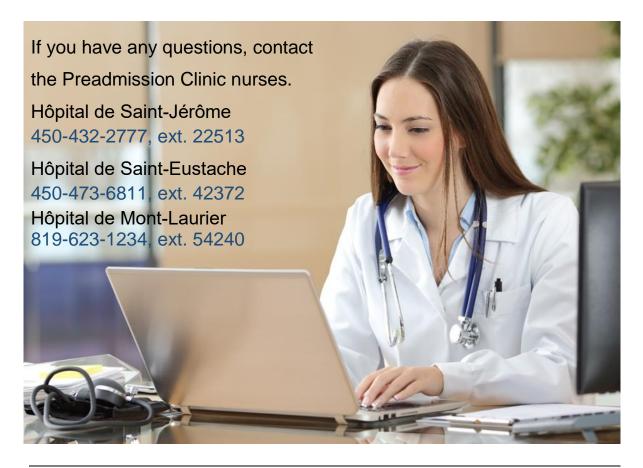
Name of the person who will accompany you: _____

Preadmission

You will have a preadmission appointment with a nurse, who will tell you how to prepare for the operation 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 the surgery.

You may need to get a blood test and 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 can 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.



© CISSS des Laurentides, July 2024

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.

Cancelling an operation

Tell us if you are ill, (cold, gastroenteritis), have an infection, are pregnant, have been in contact with someone with contagious disease (ex.: chickenpox) or are unable to come to the hospital for your surgery.

Hôpital de Saint-Eustache

450-473-6811, ext. 42051

If after 3:30 pm the day before surgery, on weekends or on statutory holidays, ext. 42195 Hôpital de Mont-Laurier 819 623-1234, ext. 54240 Open 8:00 am to 4:00 pm Monday to Friday, except statutory holidays

Hôpital de Saint-Jérôme 450-432-2777, ext. 22196







Diet

Healthy eating promotes faster recovery after an operation and helps prevent postoperative complications. Eat three balanced meals a day plus snacks, based on the Canada Food Guide.

Drink plenty of water, especially on the days before your procedure, to maximise your hydration at the time of surgery (1.5 to 2 litres a day), unless you are under a fluid intake restriction.

Eating an adequate amount of protein and energy promotes healing.

Which foods are rich in protein?

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

Alcohol and drugs



Alcohol and drug use can affect your hospital stay.

We recommend that you reduce your consumption to a minimum several weeks before the operation.

You must avoid alcohol consumption for one week before your surgical procedure.

Alcohol, drugs, anesthetics and painkillers can interact with each other.

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

Or

Contact Info-Social for resources in your area.

INFO-SOCIAL AT 811

Tobacco



To properly prepare yourself for your operation, we recommend that you **quit smoking 6 to 8 weeks before your surgery.**

Benefits of quitting smoking

Quitting smoking

Quitting smoking helps reduce the risks of anesthesia, infection risks, and respiratory and postoperative complications. Quitting smoking improves healing, facilitates recovery, and reduces healing time and the length of the hospital stay.

Stopping smoking as soon as possible is ideal and will allow you to experience fewer withdrawal symptoms during your hospitalization. However, **even stopping 12 to 48 hours before the operation** Is beneficial.

Healthcare professional

We recommend that your consult a healthcare professional (doctor, pharmacist, nurse or respiratory therapist) who can assist you and prescribe products to help you quit smoking or to manage your withdrawal symptoms while you are in hospital.

Resources

Many resources are available to help you quit smoking:

- 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) <u>https://www.santelaurentides.gouv.qc.ca/english/care-and-services/tobacco-and-vaping/</u> *Contact your CLSC if you are out of our territory.
- L'Association pulmonaire du Québec lung association: 1-888-768-6669 (tollfree) or <u>https://poumonquebec.ca/en/</u>

Physical activity

One of the keys to success for the procedure is to be active before your operation. Exercising before the operation can help you improve your endurance, muscle strength, posture, balance and cardiac health. It will help you recover more quickly after the operation. Continue exercising if you already do or start gradually with a type of exercise that interests you. For example, a 15-minute walk every day can be enough. Gradually increasing it to 30 minutes a day is even better.

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, ensuring that everything is arranged.

You may need help with meals, shopping, laundry, housekeeping and getting around after your surgery.

- □ 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 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.



The day before surgery



	 Remove nail polish or artificial nails. Remove any wig or hairpiece and false eyelashes. 			
	3. Take a shower:			
	Wash your hair with your usual shampoo.			
	Wash your face with your usual soap.			
Hygiene	Wash yourself from the neck down, washing your genitals and			
	taking care to clean your navel with a Q-Tip			
	4. Use your usual soap or a chlorhexidine-based soap, whichever			
	the nurse or your surgeon recommends.			
	5. Do not shave the area to be operated on.			
	6. Wear clean pyjamas to sleep.			
	You must stop smoking at least 24 hours before the operation if you			
Tobacco	have not already done so.			

Instructions to follow beginning at MIDNIGHT the night before your surgery.



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

Drink 500 mL (2 glasses) of sweet drinks:

- Filtered juice with no pulp (apple, grape or cranberry)
- Sweetened sports drinks such as Gatorade® or Powerade®





Take authorized medications.

If you need to take any medication before your surgery, you can take a sip of water to swallow it.



After leaving home, you must not drink anything else.

Authorized clear liquids until you leave for the hospital	Prohibited liquids
Water	Alcoholic beverages
Tea or black coffee	Coffee with milk
 Sweetened sports drinks (e.g., Gaterade[™], Powerade[™]) 	Fruit juice with pulp
 Filtered fruit juice without pulp 	Dairy products
Intered null juice without pup	 Energy drinks (e.g.: RedBull[™], Monster[™])
	 Vegetable drinks (e.g.: almond or soy milk)
	 Oral nutritional supplement (e.g.: Boost[™], Ensure[™])



Prepare your personal effects

Documents and ID

- □ This information booklet and a pen.
- Any other information brochure you have been given.
- □ Valid health insurance card.
- □ Valid hospital card.
- □ Work leave document, if required.

Medication and equipment

- □ Your medication, in their original containers, pumps and insulin.
- □ An up-to-date list of your medications (ask your pharmacist for one).
- Spirometer, respiratory exercise device, if you received one during preadmission.
- CPAP device if you have sleep apnea.

My comfort

Housecoat, anti-skid slippers, ample and comfortable clothes.

My essentials

- \Box A pack of chewing gum.
- Other personal effects (cane, hearing aid, eyeglasses, container for dentures).
- □ 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.



Medication to stop or to continue

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.

© CISSS des Laurentides, July 2024

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 artificial 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 use contact lenses, do not wear them. Wear your glasses instead.
- □ Wear clean, ample, comfortable clothes.
- □ You can brush your teeth before leaving home.
- Drink clear liquids from the preoperative diet list on the morning of the surgery.
- Follow the instructions about what medications to take or to not take the morning of the operation.

Do not drink anything after you leave home.

Arriving for surgery

On the day of your surgery, go directly to the place you were told to when we phoned to confirm your operation.

Arrive at the scheduled time. If there are any changes, we will contact you.

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, if appropriate.

Before leaving for the OR you must:

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



Going to the OR

An orderly 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.

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.

© CISSS des Laurentides, July 2024

Anesthesia

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

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 to 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 show you the anesthesia options, presented below, and pain medication possible post-surgery. The choice 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).

Drowsiness and dizziness during the 24 hours following your operation.

Normal side effects following an operation.

During this period:

- Do not make any important decisions.
- Do not drink any alcohol or take any unprescribed medication.
- Gradually begin eating, starting with liquids.

Types of anesthetics

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.

Neuraxial anesthesia

You will be given 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 catheter, 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.

The medical team in the OR will monitor you throughout the operation to control the effects of the anesthesia on your body (breathing, blood pressure, heart, etc.). Your anesthesiologist will explain the advantages of this type of technique, its side effects and possible risks.

Heartburn following general anesthesia.			
You may feel nauseous.	 You can: Change position. Practise deep breathing. Take the prescribed nausea medication, if needed. If allowed by the nurse: 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			
	Recommendation:		
Normal side effects that will gradually disappear (sore throat. dry throat, hoarse voice.	 Drink cold water 		

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).

Another method of pain relief

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 what was established with your surgeon. Your aftercare will include the following:

Medication

- The nurse will give you medication, such as analgesics and an anticoagulant (medication to thin the blood to prevent the formation of clots).
- The doctor will prescribe your usual medications.

Care

- The nurse will monitor your blood pressure, pulse and breathing rate, and check the dressing on your incision.
- You will have an IV catheter or venous access to keep you hydrated until you are able to hydrate yourself.

Exercise and movement

- 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 get up soon after you get back from your operation.

Diet

 You can eat as soon as you 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. These must be odourless and, as a precaution, please pay special attention to allergens (peanuts). No refrigerator is available. If your state of health does not meet the criteria for discharge from day surgery, you will remain in the hospital overnight. You will be discharged as soon as possible once it is safe to do so. Based on the nurse's assessment, you may remain hospitalized until seen by the surgeon.

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 stronger during the first 24 to 48 hours and then will diminish. Pain is normal for several weeks after surgery.

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:

Pain scale¹

No pain Minimal		nal	Light		Moderate		Severe		The worst		
0	1	2	3	4	5	5	6	7	8	9	10
Between 0 and 3			Between 4 and 6			Between 7 and 10					
mild, tolerable discomfort			fort	moderate and difficult to			severe and intolerable			able	
or pain that does not			tolerate pain that slows			pain that makes it almost					
prevent you from			down the performance of			impossible to perform					
performing your activities		your activities and makes			your activities						
			them difficult								

1

- 10

https://www.oiiq.org/sites/default/files/uploads/pdf/publications/perspective_infirmieres/2007_vol04_n04/05_thermometre_int ensite_douleur.pdf

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:

- To make your follow-up appointment with your surgeon (4 to 6 weeks).
- To have the prescription for your medication.
- To have the information regarding removal of wound closures or 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:



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 (according to your prescriptions)



Consult your pharmacist to fully understand the changes to your medication or for any other information about it.

Medication	Use	Instructions		
 Analgesic (painkiller) Actaminophen (Tylénol®) Celecoxib (Celebrex®) 	For light pain (0 to 4)	Take regularly during the first week then adjust based on your pain level.		
 Opioid painkiller Tramadol (Ultram®) Hydromorphone (Dilaudid®) Morphine (Statex®) 	For moderate to severe pain (4 to 10)	Take regularly for 48 to 72 hours following the operation. Then reduce the dose or space doses out based on the evolution of the pain. Reduce the dose if side effects are bothersome. Side effects include constipation, drowsiness, heartburn, dizziness. Do not drink alcohol.		

Medication	Use	Instructions			
 Anticoagulant (blood thinner) Rivaroxaban (Xarelto®) Dalteparin sodium (Fragmin®) Enoxaparine (Lovenox®) 	To thin blood. To reduce the risk of a clot forming that could block a vein in the leg (phlebitis) or, more rarely, a vein in the lungs (pulmonary embolism).	Ensure that you take it for the full prescribed time. If you forget a dose, contact your pharmacist as soon as possible. If your anticoagulant is taken by injection, you and the person accompanying you will be trained to administer it. You can help reduce the risk of developing a clot by remaining active, by moving around as much as you can.			
	 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. 				

Medication	Use	Instructions		
 Antiemetic (for nausea) Metroclopramide (Maxeron®) Dimenhydrinate (Gravol®) 	For heartburn and vomiting.	This medication is more effective if taken 30 minutes before eating. Follow the instructions provided by your healthcare team or your pharmacist.		
 Laxatives (for constipation) Docusate de sodium (Colace®) Sennosides (Senokot®) Polyethylene glycol 3350 (Lax-A Day®) 	For constipation	Ask your pharmacist for advice. Consult the "Constipation" section as well.		
Antacids Pantoprazole (Pantoloc®) 	To relieve stomach acidity, gastric reflux.	Follow the prescription's recommendations or the pharmacist's advice.		



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.

It is normal...

Having an operation is very demanding on your body.				
Many situations can be stressful but are normal.				
Fatigue	To feel tired. Alternate rest periods and activities and gradually increase your activity level.			
Problems concentrating	To have problems concentrating. This is temporary following anesthesia and will return to normal.			
Emotional instability	To feel emotional instability. Take it calmly, this reaction will gradually fade away.			
Pain	Pain can be intense during the first days following surgery. Don't put up with pain, take your medication.It is normal to feel pain for 10 to 30 minutes after doing the exercises.We recommend that you take your pain medication 30 to 45 minutes before starting your exercises.			
Sensitivity around the scar	Sensitivity around your scar will not be the same as elsewhere for several weeks. This is normal and is due to the cutting of small nerve nets during the operation. Sensitivity should return to normal in a few months to a year.			
Swollen leg	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.			
Hematoma (large bruise)	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.			

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.
- Inability to eat, heartburn or persistent vomiting.
- Numbness or the feeling of being frozen for more than 48 hours.
- Strong pain in the leg that was operated on that is not relieved by painkillers taken regularly.

Come to EMERGENCY if:

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

You are worried, if you feel worse and worse with every passing hour, come to Emergency.

Homecare

- When you are discharged from the hospital, follow-up will be done by 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 level, check your incision and remove the dressing 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.



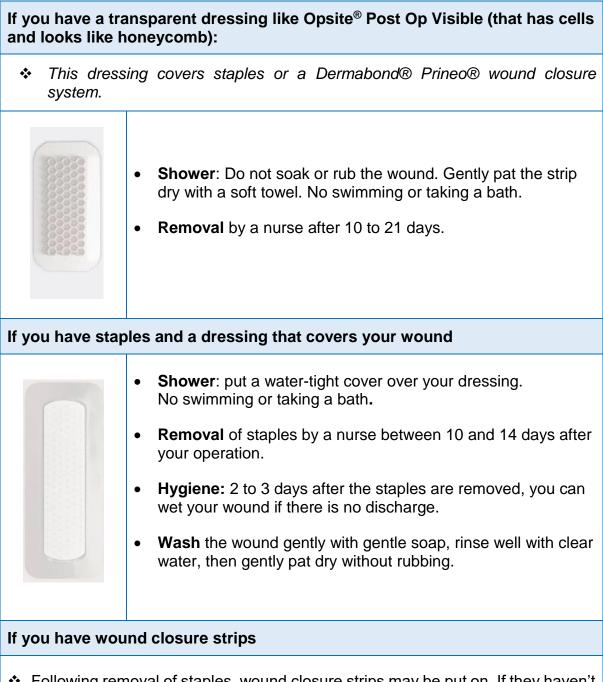
Wound care

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 to not 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.

/ound closure with DERMABOND [®] PRINEO [®]				
	d closure system replaces surgical staples, and it must not be efore the prescribed date without the formal advice of the orthopedic			
Fermeture DERMABOND PRINEO	 Shower: Do not soak or rub the wound. Gently pat the strip dry with a soft towel. No swimming or taking a bath. No ointment, lotion, cream or petroleum-based product (Vaseline®) on the strip. Do not scratch or rub the strip; that could unstick it before the wound has healed. It is normal for the strip to change colour on contact with your clothes. Discharge: place compresses on the strip to absorb the fluid; do not stick anything on the transparent film. If you have to change or add compresses, contact your CLSC nurse. Removal by a nurse between days 10 and 21. 			

If you notice that the Dermabond[®] Prineo[®] is starting to let go or become detached in an unusual way, contact your healthcare professional.



Following removal of staples, wound closure strips may be put on. If they haven't fallen off after 10 days, you can gently remove them.

Elimination and constipation

Some patients experience constipation after surgery. This is predictable and due to reduced mobility and food intake after surgery, as well as taking certain pain medication. Maintaining your exercise regimen, practising mobility and healthy living habits (eating and sleeping) are strongly recommended to get through this period.

Intestinal gas (farting) often causes discomfort. Walking is a simple and effective way to reduce this discomfort and help intestinal activity to resume.



To avoid constipation:

Hydration	Increase your fluid intake (to 7 or 8 glasses of water a day unless your doctor has given you a restriction).
Fibers	Eat more fibre such as whole wheat or multigrain bread and pasta, oats, buckwheat, pot barley, ground flax seeds, fruits and vegetables.
Walking	Go for regular walks.
Laxative	If your doctor prescribes it, take stool softener medication.
Medication	Ask your pharmacist for advice.



Avoiding infection

Any infection in another part of your body (bladder, finger, toe, tooth, lungs, etc.) can travel through your blood and infect your prothesis. 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.



Joint care

lce

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 small vegetables 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 experience 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.

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 on 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 non-slip shoes or 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 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 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 (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 stall.
- Install non-slip mats inside and outside the bathtub.
- Install a hand-held showerhead 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 road surface, 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 position 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.





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).

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

CLSC in Lanaudière

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

CLSC 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

Centre multiservices de santé et de services sociaux de Sainte-Agathe-des-Monts 1-855-766-6387 234 rue Saint-Vincent, Sainte-Agathe-des-Monts, QC J8C 2B8 Hôpital 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

If you need to leave a message, give your name, date of birth, municipality, and the date of your surgery, and explain the situation. You will be called back in 24 to 72 hours.

Service Quality and Complaints Commissioner

The Service Quality and Complaints Commissioner provides support to individuals who receive services provided in the following facilities of the CISSS des Laurentides.

- 1-866-822-0549 or 450-432-8708
- info-plaintes@ssss.gouv.qc.ca
- <u>https://www.santelaurentides.gouv.qc.ca/english/service-quality-and-</u> <u>complaints-commissioner/</u>

CISSS des Laurentides Users' Committee

The Users' Committee provides support to individuals who receive care and services provided in the facilities of the Centre intégré de santé et de services sociaux (CISSS) des Laurentides.

https://www.santelaurentides.gouv.qc.ca/english/users-committees-and-in-patientscommittees/

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

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

 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

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 will 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: <u>https://www.bienetrerapide.com/</u>

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

Game Ready[®]

Tel: 1 844 441-3278 (toll-free) Email: support@healtfaster.ca

Community resources

Lower Laurentians

<u>Centre d'action bénévole (CAB) Solange-Beauchamp</u> (Solange-Beauchamp Volunteer Action Centre) Many services available, including transport escort, community and medical accompaniment, Meals on Wheels, friendly visits

65 boul. de la Seigneurie Est, Suite 101, Blainville, QC J7C 4M9 Tel: **450-430-5056** / Fax: **450-430-0203** Email: <u>info@cabsb.org</u> Website: http://www.cab-solange-beauchamp.com/

Centre d'action bénévole les Artisans de l'Aide

(Les Artisans de l'Aide Volunteer Action Centre)

Many services available, including transport escort, Meals on Wheels, friendly visits

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/

Centre d'action bénévole d'Argenteuil

(Argenteuil Volunteer Action Centre)

Many services available, including transport escort, Meals on Wheels

212 rue Wilson, Lachute, QC J8H 3J3

Tel: 450-562-7447

Website: http://cabargenteuil.ca/

Central Laurentians

Centre d'action bénévole Saint-Jérôme Inc.

(Saint-Jérôme Volunteer Action Centre)

Many services available, including transport escort, Pair Program, Meals on Wheels, friendly visits

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/

Entraide bénévole des Pays-d'en-Haut

Many services available, including transport escort, Meals on Wheels, friendly visits

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/

Upper Laurentians

Action bénévole de la Rouge Inc.

Many services available, including transport escort, Meals on Wheels, friendly visits (Léonie-Bélanger Volunteer Action Centre)

284 rue l'Annonciation Sud, Rivière-Rouge (QC) J0T 1T0 Tel: 819-275-1241 / Fax: 819-275-1700 Email: <u>abr@qc.aira.m</u> Website: https://www.cdchl.org/action-benevole-de-la-rouge-inc

Centre d'action bénévole Léonie-Bélanger

(Rivière-Rouge Volunteer Action Centre)

Many services available, including transport escort, Meals on Wheels, Pair Program, friendly visits

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/

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 July 2023



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 hip ankylosis (stiffness).

- 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 your 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 when resting in bed or sitting.



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 again from the beginning until you feel the benefits.



Breathing exercises

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.

Do these 10 times every hour.



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
 Breathe in SLOWLY and DEEPLY through your nose (through your mouth if your nose is obstructed) inflating your chest. 	 Breathe in through your nose or mouth, inflating your stomach. Use your hand to feel your abdomen inflate.
2. Breathe out SLOWLY through your mouth, lips pursed as if to blow out a candle.	2. Breathe out through your mouth, lips pursed as if to blow out a candle.

Source images : CHUS, 1986

<u>Unless otherwise indicated</u>, 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. Breath normally. Rest between the exercises.
- **F)** Repeat steps 2 to 5 about 10 times every hour from when you wake up. Do it every day during the times you are awake.







© CISSS des Laurentides, July 2024

Coughing and spitting exercises

Preferably in a sitting position:

- **1.** Take 2 deep breaths, breathing in through your nose and out through your mouth.
- 2. Breathe in deeply through your nose or your mouth.
- **3.** Hold your breath for a count of 3.
- **4.** 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.
- 5. Rest. Repeat the exercise 2 or 3 times every 2 hours while you are awake.
- 6. Do them every day during the times you are awake.



Exercises to improve circulation

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.

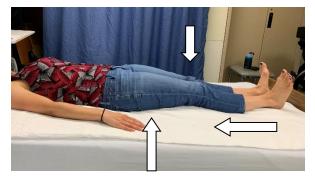
Do it 30 times in 1 minute or more; repeat every hour.





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 you thumbs and index fingers. Without pressing your kneecap against your femur, move your kneecap in the 4 directions (toward your femur, move your 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.



Notebook	Source : Pixabay

Important dates

Appointment	Date	Time

Your operation will take place on:	
Hospital arrival time:	
Location:	

This booklet is available online at:

https://www.santelaurentides.gouv.qc.ca/english/care-and-services/surgery/



