

# Hip Arthroplasty

Bring this guide with you to the hospital on the day of your surgery

Day of surgery: \_\_\_\_\_ Expected discharge home: \_\_\_\_\_

Surgeon: \_\_\_\_\_ Phone number: \_\_\_\_\_

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## Introduction

This information guide will help you understand what is involved in hip arthroplasty (hip replacement). We hope the information in this booklet will help you prepare for your surgery.

## About Hôpital Montfort

Hôpital Montfort is Ontario's francophone academic hospital, offering exemplary, person-centred care. Montfort serves more than 1.2 million people in Eastern Ontario, in both official languages. Our daily actions are guided by compassion, respect, mutual support, excellence and accountability..

## Your Health Care: Be Involved!

- Be involved in your health care. Speak up if you have questions or concerns about your care.
- Tell a member of your health care team about your past illnesses and your current health condition.
- Tell your health team if you have any food or medication allergies.
- Make sure you know what to do when you leave the hospital.

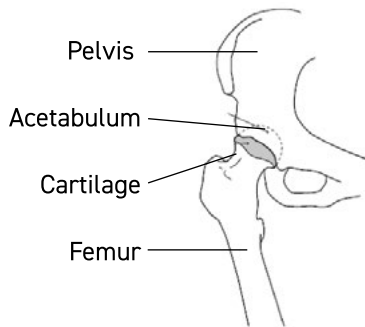
## Your Interprofessional Plan of Care

- During your stay in hospital for your total hip replacement we will follow an “interprofessional plan of care” more commonly called a “Clinical Pathway”.
- This is your version of the Clinical Pathway. It is an interactive document. Please take notes if necessary when the nurse is discussing with you.
- It has been prepared so that you, your family, and the members of the healthcare team know your plan of care. It gives you an idea of the tests you will undergo and the treatments you will receive
- Once you and/or your family have read the information in this booklet, please feel free to ask any member of the healthcare team any questions.

# 1. Hip Arthroplasty

## 1.1 Hip anatomy

The hip joint is a ball and socket joint – that's why you can move your hip in many directions. The ball is the round head of the thigh bone (femur). It moves in the socket of your pelvis (acetabulum). Muscles and ligaments support and strengthen the joint.



## 1.2 Common hip problems

### Arthrosis

A change in joint cartilage can lead to a cartilage lesion. Over time, the bone beneath the cartilage is no longer protected and begins to deteriorate.

### Inflammatory arthritis

Rheumatoid polyarthritis can lead to inflammation of the joint membrane characterized by hot, swollen and painful joints gradually leading to joint stiffness.

### Necrosis

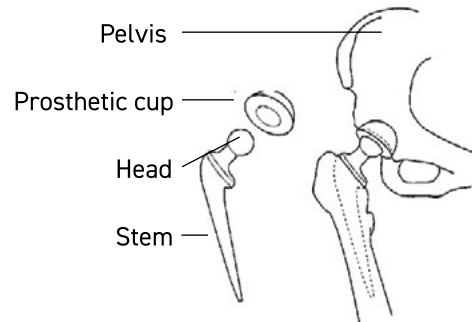
A serious fracture, steroid use or long-term alcohol abuse can prevent blood from irrigating the iliac bone. This leads to bone tissue death and joint destruction.

## 1.3 Types of Hip Replacement

### Total hip replacement

In total hip replacement surgery, the surgeon replaces the diseased joint with an artificial joint (prosthesis). First, the surgeon makes an incision and moves the muscles and ligaments away from the hip joint. Then the head of the thigh bone is replaced with an artificial ball and stem. The pelvic socket is smoothed and lined with a prosthetic cup. Then the joint is put back together with the ball fitted into the cup. Once the new joint is in place, the muscles and ligaments are repaired. Your skin is closed with sutures or staples (staples are metal clips that hold your skin together while the incision heals). This surgery takes about two hours.

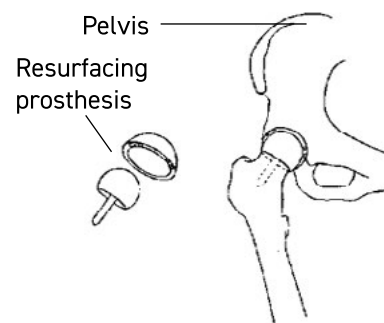
Today, many patients who have hip replacement surgery can move their joint more easily, have less pain and are able to walk more comfortably for up to 25 years after surgery.



### Hip resurfacing

Hip resurfacing is a type of hip replacement surgery that may be suggested by your surgeon based on a number of factors including the degree of damage to your joint and your overall health.

In this surgery, the surgeon replaces the diseased joint with a special form of artificial joint (resurfacing prosthesis). First, the surgeon makes an incision and moves the muscles and ligaments away from the hip joint. Then the damaged cartilage and some parts of the bone surface are removed from the head of the thigh bone (femur) and the hip socket (acetabulum). A ball-shaped cap is placed over the head of the thigh bone. The hip socket is smoothed and lined with a molded shell. Once the joint is put back together, the muscles and ligaments are repaired. Your skin is closed with sutures or staples (staples are metal clips that hold your skin together while the incision heals).



## 2. Before surgery

### 2.1 Hôpital Montfort's Pre-Operative Education Session

Montfort offers a Pre-Operative Education Session to inform and prepare patients and their relatives before surgery. It is mandatory and usually takes place online at your own pace. After your visit to the arthroplasty clinic, you'll receive a prehab pamphlet with a link to the website containing information capsules and community resources relevant to your surgery. You can watch the videos with a family member or friend, as many times as you like. If you don't have access to Internet, you can organize a face-to-face session at Carrefour Santé Aline-Chrétien. Please refer to the pre-ab pamphlet available on the patient portal..

The occupational therapist will explain the surgery, what to expect during your hospital stay, precautionary measures for your hip and what you need to prepare for your return home after the surgery. The physiotherapist will explain the exercises you need to do to prepare for the surgery.

Please consult the prehab questionnaire available online to familiarize yourself with the questions that will be asked during your preoperative telephone consultation with the physiotherapist and/or occupational therapist.

### 2.2 Your appointment at the Pre-Admission Clinic

You will have an appointment at the Pre-Admission Clinic about 2 weeks before your scheduled surgery date to help you prepare for your surgery. It's possible that the meeting with the pre-admission nurse takes place by telephone or telemedicine.

Please bring the following items to your appointment:

- your health card;
- a list of your current medication provided by your pharmacy (even natural products and over-the-counter medications);
- if you are taking anticoagulants or aspirin, make sure to inform the surgeon and mention it to the nurse at the Pre-Admission Clinic;
- all information regarding your health insurance plan;
- the name and contact information of the person you have designated to be responsible for all decisions concerning you (if you choose not to sign the power of attorney for personal care form);
- your weight, height and neck circumference.

- paper and a pen
- this information guide.**

The visit to the pre-admission clinic generally lasts 3 to 4 hours. If possible, ask a family member or friend to accompany you. If you need an interpreter, ask a family member to accompany you. Bring a bottle of water, snacks and entertainment (books, headphones, etc.).

During your appointment at the Pre-Admission Clinic, you may have diagnostic examinations (x-rays) or laboratory examinations (blood tests) depending on your surgeon's recommendations.

To properly prepare for your surgery, you will have meetings with several members of your healthcare team:

- The **pharmacy technician or pharmacist** will meet you to take note of the medications you are taking at home. For this meeting, bring a list of your medications.
- The **nurse** will meet you to complete your health assessment and specific questionnaires on your lifestyle and health needs.
- Next, to ensure personalized follow-up after your Pre-Operative Education Session, the **occupational therapist** will review the hip precautions you need to take after surgery, will advise you and discuss recommendations of equipment necessary for you to safely return home or to another location after the surgery.
- The **physiotherapist** will answer your questions about the exercise program, the physiotherapy you will do after your discharge from hospital or any other questions you may have regarding your discharge.

NB: Except in exceptional cases, appointments with physiotherapists and occupational therapists are made by telephone only.

You might meet other healthcare professionals during your appointment, including:

- an anesthesiologist (if you have questions about anesthetics, you will be able to ask them at this time);
- an internist (e.g., cardiologist, respirologist, etc.);
- a social worker;
- a professional dietitian.

## 2.3 Prevention of surgical site infection

### Pre-operative screening for *Staphylococcus Aureus* (SA)

#### Why screen for SA?

For several years, there has been a dramatic increase in the number of antibiotic-resistant bacteria (microbes). The most common resistant microbe in hospitals is staphylococcus aureus.

Generally, these microbes do not cause any health problems. However, they can sometimes cause infection if they penetrate the skin or the incision. No treatment is necessary unless the patient has an infection. If an infection develops, it may be harder to treat because the choice of antibiotics is limited.

#### How do you screen for SA?

The laboratory technician will insert the tip of a cotton swab 1-2 cm into each of your nostrils and rotate it 2 or 3 times against your mucous membranes.

**If your test is negative**, no follow-up is necessary.

**If your test is positive**, you will receive a call from the office of your treating physician. You will be given a prescription with instructions to follow for bacterial decolonization before your scheduled surgery date.

## 2.4 Nutrition

Good nutrition will help with recovery after your surgery and reduce the risk of infection. Here are some important nutrients you will need before and after your surgery.

### Proteins

Protein promotes healing after surgery. You will need more protein than usual; therefore, eat at least 3 portions of each of these food groups everyday.

#### Meat and substitutes 1 portion contains :

- 85 grams (3 ounces) of meat, poultry or fish
- 2 eggs
- 170 grams (3/4 cup) of legumes
- 170 grams (3/4 cup) of tofu
- 2 tablespoons peanut butter

#### Milk and substitutes 1 portion contains :

- 225 ml (1 cup) of milk or soy beverage
- 55 grams (2 ounces) of cheese
- 175 ml (3/4 cup) of yogurt

Hôpital Montfort's admitting department will call you at home to schedule an appointment.

My appointment at the Pre-Admission Clinic is on:

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If you have any questions, please call Hôpital Montfort at 613-746-4621, ext. 4919.

The appointment at the Pre-Admission Clinic usually lasts 3 to 4 hours. If possible, ask a relative or friend to accompany you. If you need an interpreter, have a relative come with you.

### Multivitamins

Multivitamins are not necessary if you have a healthy and varied diet. It is preferable to obtain your nutrients from a healthy diet than from supplements, when possible. If you have a history of anemia, talk to your physician, pharmacist or dietitian about possible supplements.

### Calcium and vitamin D

It is important to take calcium and vitamin D to ensure strong bones. Adults should consume 2 to 3 portions of milk or calcium and vitamin D fortified food everyday. It is recommended that people 50 years and older take a vitamin D supplement of at least 400 UI. Ask your physician, pharmacist or dietitian to recommend the right supplements for you.

### Fiber and water

Prior to an arthroplasty, it is important to have regular soft stools at least every 3 days. You may need to add emollients or laxatives if you go 2 days without stools, since constipation can lead to complications. Therefore, it is important to eat foods high in fibre before and after the surgery, such as whole grains, bran, fruits, vegetables, beans and lentils. Eat them throughout the day and drink at least 2 L (8 cups) of liquid a day (juice, milk, tea, coffee), half of which should be water.

For more information on nutrition, consult Canada's Food Guide.

## 2.5 Weight management

If you are overweight or underweight, you may have a more difficult post-operative recovery. If you are overweight, it would be good to try to lose a moderate amount of weight in order to reduce your hip pain and enable you to accomplish more activities. Keep in mind that every ½ kg (1 pound) you carry places approximately 2 additional kg (3 to 6 pounds) on your hips. If you are trying to lose weight before your surgery, do not exceed ½ kg per week. Avoid fad diets that could deprive you of nutrients and slow down your recovery.

**½ Excess kg (1 lb) = around 2 additional kgs (3 to 6 lbs) on your hips**

If you are underweight, it may be harder for you to heal after surgery. Therefore, it is important for you to eat well in the weeks leading up to the surgery.

If you are worried about being over or underweight before the surgery, talk to a professional dietitian. For information on nutrition or certain nutrients, visit the Dietitians of Canada website at [www.dietitians.ca](http://www.dietitians.ca) or if you live in Ontario, you can call Eat Right Ontario at 1-877-510-5102.

## 2.6 Pre-operative exercises

Doing exercises before your surgery will make for a faster and easier recovery. Also, getting to know a new exercise program adapted to your hip is easier before the surgery than after, given the incision and pain related to the surgery. Choose activities that do not stress your joints, such as:

### After your appointment at the Pre-Admission Clinic, you will know:

- what type of surgery you are having;
- what you need to do at home to prepare for your surgery;
- that you must not smoke (tobacco or cannabis) or drink alcohol at least 24 hours before the surgery;
- what you need to do the morning of your surgery and where to go;
- when to stop drinking and eating before your surgery;
- what medications you need to take the morning of your surgery and which ones you need to stop taking before your surgery;
- how to prepare your skin before your surgery to prevent infection;
- the type of care you will need after your surgery.

**Note: Please contact your surgeon's office as soon as possible if you have a fever, flu, cold or sore throat or if you need to cancel or postpone your surgery.**



- exercises in a pool, like swimming or walking in water;
- cycling;
- walking with nordic poles;
- light stretching and strengthening exercises;
- exercises demonstrated by the physiotherapist in informative capsules on the website (pamphlet prehab);
- balance exercises (useful for preventing falls).



These activities will allow you to strengthen your muscles, improve your endurance and help you keep your joint moving. They will also help you build up your confidence and

prepare you for the exercises you will have to do after the surgery. Remember, after surgery you will have to do daily exercises for several months as part of your rehabilitation.

Be sure to strengthen your arm muscles, as you will need to rely on your arms after surgery to use your walking aids, get into bed, sit down and get up. If possible, start the strengthening exercises at least 3 to 6 weeks before your surgery.

**Example:** While you are sitting, lift yourself up by pushing down on the armrests. Perform up to 10 repetitions twice a day. Make sure to maintain good back posture throughout the exercise, as if a small string were pulling you upward.

If this exercise is painful, you are just starting to do exercises or you have health problems, consult your physician before starting a new exercise program. If you don't know how to get started, talk to a physiotherapist.

## 2.7 Preparing at home for surgery

It is important to set up your home **before** your hip arthroplasty so that you can move around more easily with a walker and reduce your risk of falling. Use this checklist as a guide:

- ❑ Clear hallways and rooms. Remove objects that you could trip over like carpets and footstools.
- ❑ Lay down non-slip surfaces on stairs and outside entrances.
- ❑ Make sure stair railings are securely fastened. Consider installing one if you don't have one.
- ❑ Make sure you have a firm chair with armrests that is the right height for you (approximately 5 centimetres (2 inches) higher than your knee).
- ❑ Make sure lighting is adequate in hallways and other rooms that you use.
- ❑ Arrange for help if needed for household tasks (e.g., vacuuming, laundry, grocery shopping).
- ❑ Place frequently used household items (e.g., pots) at counter height. Consider moving items that are usually in the bottom of your refrigerator or freezer to a higher shelf. Items should be between hip and shoulder level.
- ❑ Buy healthy foods. Prepare meals in advance and freeze them. There are also food and meal delivery services available in the community.
- ❑ Keep an icepack in the freezer that you can use after the surgery if your joint is swollen. You can also use a bag of frozen peas or corn kernel.
- ❑ Plan to have help at home (e.g. family or friends) to facilitate your return.



For the Bathroom:

- ❑ Toilet seat raised 10 centimetres (4 inches), with or without armrests, or commode chair without wheels to place above the toilet.
- ❑ Install a transfer bench (in the bathtub) or a raised shower chair (in a shower stall).
- ❑ If your bathtub has sliding doors, replace them with a shower curtain.
- ❑ Place a non-slip bathtub mat in the bathtub or shower stall and one beside it.
- ❑ Install a hand-held shower hose in the bathtub.
- ❑ It is very useful to install grab bars in the bathtub, shower stall and beside the toilet. Some grab bars are removable.

If you can't get help at home, you may need to plan your convalescence in a residential facility. A list of available residences in the region is available on our website, under Information capsules, in the Community resources section.

## 2.8 List of accessories to obtain before surgery

Make sure you obtain the walking aids listed below prior to your surgery so that your physiotherapist can adjust them to your height.

- ❑ Two-wheel walker (12 centimetres [5 inches] unidirectional) – **required**
- ❑ Single straight cane (strongly recommended if you have stairs at home) and as a transition after the walker.
- ❑ High-density foam cushion (firm) (measuring at least 10 cm x 41 cm x 46 cm; 4 in x 16 in x 18 in), (to put in the car for the drive home)
- ❑ Aids for getting dressed (66 centimetres [26 inches] long-handled reacher, 60 centimetres [24 inches] long-handled shoe horn, sock aid), (60 centimetres [24 inches] long-handled sponge, elastic laces (or enclosed heel slip-on shoes without laces).
- ❑ Shower and/or bath chair (highly recommended for people with shower cubicles)
- ❑ Raised toilet seat (optional), with or without armrests (Grab bars are highly recommended).

Orthopedic supply stores and pharmacies sell or rent these items. Some suppliers offer monthly rental, therefore, pick up this equipment a few days before your surgery, if possible. Check to see if your insurance plan covers these expenses. If a medical

prescription is necessary, it would be best to discuss this with your surgeon so that you can get a refund. You can also ask your friends and relatives if they have any equipment you could borrow.

The list of stores supplying medical equipment is available on the website under the "Community resources" section.

## 2.9 Other things to do before your surgery

- ❑ Hôpital Montfort's admitting department will call you between 2 p.m. and 5 p.m. on the working day before your surgery, to confirm the time and place you need to go on the morning of your surgery.
- ❑ You must prepare the items you will bring with you to the hospital the day of your surgery (see



the list in Section 3.1 of this information guide).

- ❑ Complete the preparation of your skin for surgery as explained by the pre-admission clinic nurse (*refer to the perioperative shower instructions*).
- ❑ Put your name on all items that you are bringing to the hospital (e.g., walker, crutches and on your reusable bag).
- ❑ Be sure to know when you will be discharged from the hospital so that you can arrange for your transportation home.
- ❑ Make arrangements for someone to be close by for the 72 hours following your discharge from hospital.
- ❑ Make sure you have a thermometer to take your temperature as needed at home after the surgery.

Arthroplasty is an elective surgery (planned in advance). It is therefore your responsibility to organize your discharge from hospital and your convalescence according to your needs.

## 3. The surgery

### 3.1 Checklist of things to bring to the hospital the day of your surgery

Pack your bag for the hospital. Bring:

- this information guide (important);
- If you are admitted, toiletries (toothbrush, hairbrush, etc.);
- loose fitting clothes to exercise in and to wear home;
- bring your walker labelled with your name
- comfortable, closed toe and heel shoes/slippers with non-slip soles. Your shoes should be roomy since you will have some swelling in your feet;
- eye glasses and reading materials;
- hearing aids;
- your medication, following the instructions given to you during your appointment at the Pre-Admission Clinic;
- a light snack if your surgery is day surgery
- a credit card number if you are admitted and plan to stay overnight and plan to rent a TV.

**Hôpital Montfort is not responsible for the breakage, loss or theft of personal effects. It is important that you not keep valuable items and large sums of money with you during your stay.**

### 3.2 At home the day before surgery

- Do not eat anything after midnight. You can only sip water or apple juice, up to 2 hours before the surgery, **up to a maximum of one cup (250 mL).**
- Do not chew gum or eat hard candy (gum and candy can cause the accumulation of 1.5L (6 cups) of liquid in the stomach).
- Do not wear jewellery, contact lenses, nail polish, makeup, perfume, hair spray or deodorant the day of your surgery.
- Take out any body piercings, particularly earrings. These objects can cause burns if electrical equipment is used in the operating room. If it is located close to the surgical site, the piercing can cause an infection.
- **Do not shave your legs**, because if you cut yourself or irritate your skin, your surgery could be cancelled.

#### Medication

- If you are diabetic, follow the instructions the nurse gave to you during your appointment at the Pre-Admission Clinic. It is usually recommended not to take oral hypoglycemics, **unless indicated otherwise by your physician.**
- Take your usual medication with a sip of water before going to the hospital, **unless the nurse, surgeon or anesthesiologist has indicated otherwise.**
- If you are asthmatic and you use an inhaler (pump), use it according to your prescription and bring it with you to the hospital.

### 3.3 The day of the surgery

When you get to the hospital, please proceed to the Operating Room reception, **room 2A105**, at the scheduled time. Be sure to bring your health card.

### 3.4 At the Day Surgery Unit on the day of surgery

- Be aware that the Day Surgery Unit is a large room where both male and female patients are admitted before their surgery. Curtains are drawn between the beds for patient privacy.
- Before the surgery, you will change into a hospital gown, and the nurse will start an intravenous line.
- If the surgeon recommended a catheter, the nurse will insert the catheter before you are taken to the operating room.
- A porter will bring you from the Day Surgery Unit to the operating room.

### 3.5 During the surgery

- Before entering the operating room, you will see the surgeon, anesthesiologist and operating room nurse.
- The anesthesiologist will evaluate your health condition and recommend the safest anesthetic for you. A regional anesthetic, such as spinal, or a combination of techniques, is often used. The spinal anesthetic is like the freezing you get at the dentist, except it is administered in the back and numbs you from your chest down to your lower limbs so that you won't feel any pain during the procedure.
- If you receive this type of anesthetic, you won't be able to move your legs for up to 4 hours after the surgery.
- The anesthesiologist will monitor your comfort throughout the surgery and will give you medication through your IV that will make you feel relaxed and sleepy.
- Some patients receive a general anesthetic, which involves administering medication that will put you to sleep during the surgery.

### 3.6 In the recovery room after the surgery

- After the surgery, you will be taken to the recovery room or post-anesthesia care unit. You will stay there for a minimum of 30 minutes.

- The nurse will frequently check your blood pressure, pulse, pain level and the bandage that will cover your surgical incision.
- You may be wearing an oxygen mask for a short time.
- As we check your condition, do not hesitate to describe what you are feeling, for example, nausea, pain, discomfort, thirst, dry mouth, itchiness, inability to urinate. The nurse can take steps to relieve your symptoms.
- You will feel drowsy after the surgery, but as you start to wake up you will be asked to breathe deeply and do exercises with your feet and legs. These exercises will help prevent complications related to blood clots.
- If you suffer from sleep apnea, you might be transferred to a special unit where you will be more closely monitored the first night following your surgery. You can discuss this in greater detail with your healthcare team if necessary.
- A member of your care team will help you stand up for the first time after surgery, as recommended by your surgeon, to promote blood circulation.

### 3.7 In the patient care unit after the surgery

- From the recovery room, you will be taken by a carrier either to day surgery, if you are scheduled to go home the same day, or to your room, where you will stay until you are discharged.
- On your arrival, you will be on an IV to keep you hydrated and to administer medications like intravenous antibiotics. You will also have a dressing on the area of the hip that was operated.
- Your nurse will regularly check your pain level and administer medication as needed. Where possible, the physiotherapist will coordinate their interventions with your analgesic schedule.
- A member of your healthcare team will help you get up for the first time on the day of the surgery, as recommended by your surgeon, in order to encourage circulation.

- You will be informed of the weight you can place on your new joint. This weight varies depending on the person. Most surgeons prefer weight bearing according to tolerance, where pain is your guide, in order to accelerate healing, as well as to normalize your gait pattern right away. However, you may have restrictions (e.g., partial, very light or no weight) for the operated leg, which will be explained to you by your healthcare team.
- You will be seen by a physiotherapist at this time for an assessment of general mobility, stair climbing and review of exercises before returning home.

## 4. Post-surgery care

### 4.1 General instructions after your surgery

- Avoid activities requiring concentration. You will need several hours before you regain your full concentration.
- Eat a light first meal after the surgery.

### 4.2 Ankle and deep breathing exercises

#### Ankle exercises

Point your toes towards your head, then towards the foot of the bed. Repeat this exercise 10 times every two hours, when you're awake, until you start walking again.

#### Deep breathing exercises

Breathe deeply through your nose a few times and cough every hour to clear your lungs.

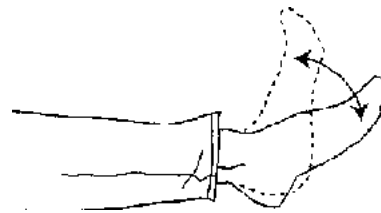
### 4.3 Pain control

It is very important to control post-operative pain in order to maximize your healing. The healthcare team will use several methods to relieve your pain including anti-inflammatories and local analgesic injections around the hip (given in the operating room); this will help to reduce the sensitivity of the area that was operated.

Before you return home, your nurse will show you how to use the pain scale to describe the intensity of your pain. The number "0" is no pain while "10" is the worst pain possible.

#### Pain assessment

- The goal is to keep your pain at 4 or below at all times.
- As a general rule, analgesics are administered in the form of oral tablets.
- Different medications will be prescribed to control your pain. The combination of these medications makes it possible to reduce the side effects that are caused when each medication is taken alone, and provides more effective pain control. It is important to talk to your healthcare team to find out how and when to take these medications to maximize relief of your pain and symptoms.



- Analgesics can have side effects: nausea, vomiting, drowsiness, itchiness or constipation. If you feel any of these symptoms, talk to your nurse as soon as possible.

## 4.4 Pain control at home

Most people's pain decreases gradually after 6 to 12 weeks. If pain is preventing you from caring for yourself, sleeping and/or exercising, talk to your physiotherapist or doctor. If your pain becomes increasingly worse or if you have pain in a new part of your body, seek medical attention immediately.

Here are some ways to help you manage your pain

- Take pain medicine as directed. It is normal to have some increased pain or symptoms during physical activity or physiotherapy sessions. It may be helpful to take a dose of pain medicine 1 or 2 hours before engaging in these activities in the first weeks after surgery. It is better to take medicine **before** the pain is severe.

### Pain assessment



- Ice can reduce pain and inflammation. Place an ice pack wrapped in a towel on your joint as directed by your physiotherapist. Maximum = 15 minutes/hour
- Pace yourself. Do not push yourself. Regular rest is an important part of your healing process.
- Change your position regularly (every hour, except at night).
- Relax. Use relaxation techniques such as breathing exercises or progressive muscle relaxation (progressive muscle relaxation is when you tighten and relax each part of your body, starting with the toes and working up to your neck).
- Distract yourself. Listen to music, visit with friends, write letters, watch TV.
- Think positively. You will become more and more comfortable as you recover from your surgery.

## 4.5 Constipation and urinary elimination

Changes in your diet, reduced activity and the analgesics used to control your pain can reduce intestinal function and cause constipation. Here is how you can relieve this in the hospital and at home:

- Drink a minimum of 2 L (8 cups) of liquid a day. Water is the best choice for maintaining hydration.
- Eat foods high in fibre, such as prunes, bran, beans, lentils, fruits and vegetables.
- Move as much as possible and do your exercises.

The physician may prescribe laxatives and emollients as needed. You may have to continue to take these at home. If you suffer from constipation at home, talk to your family physician or pharmacist. Constipation can sometimes be serious so do not ignore your symptoms (nausea, abdominal pain, loss of appetite and, in rare cases, vomiting). If untreated, it could cause intestinal blockage.

The inability to urinate is a temporary problem and common after all types of surgery. If this is the case for you, tell your nurse right away. It may be necessary to temporarily insert a catheter (a tube) to empty your bladder, evacuate the urine and prevent complications before you return home.

## 4.6 Anticoagulants

After a hip arthroplasty, blood clots can form in rare cases. Here is how to reduce the risk of blood clots after surgery:

- Take the anticoagulants as prescribed by your surgeon at the same time each day (Xarelto, an injection of Lovenox, Fragmin or other);
- Get up and move regularly every hour (except at night);
- If you are admitted to hospital, maximize the use of intermittent pneumatic compression commonly referred to as a venous pump during your hospital stay. This air pump inflates and deflates an air-tight bag around your leg and prevents blood clot formation.

The format of anticoagulants varies. They come in tablet form or as an injectable solution. At the hospital, you may receive anticoagulant injections that you will continue at home. Or you may receive an injection at the hospital, but an oral anticoagulant will be prescribed once you are home. Your surgeon will discuss this with you in order to determine the best option based on your needs.

## 4.7 Wound care

- The edges of the wound will be closed using absorbable stitches, staples or Steri-Strips. The staples are metallic and keep the edges of the wound in place while your skin heals. They will be removed approximately 14 days after the surgery in the physician's office. If you have Steri-Strips, do not touch them. They will detach and fall off on their own.
- It is important to keep the wound and dressing dry. Do not touch the incision and make sure the surrounding skin is clean.
- You will leave the hospital with a clean dressing that you can take off 7 to 10 days after your discharge.
- Once the wound has healed well, massaging the scar will be a very important aspect of cicatrization. Usually, scar tissue forms around the incision, which can cause adhesion of the skin and muscle. This phenomenon can hinder maximum hip movement. Talk to your physiotherapist about safe techniques for massaging the scar. Make sure to practise good hand hygiene before massaging the scar. Vitamin E cream, without perfume or skin irritants, can improve massage efficiency and healing of the wound.
- Please refer to the information capsules on the website for a video explaining how to perform the scar massage correctly. Your incision must be completely healed (4 to 6 weeks) before submerging it in water (bath, spa, pool, etc.).

## 4.8 Sexuality after hip arthroplasty

You can resume sexual relations as soon as you feel comfortable, usually 4 to 6 weeks after the surgery. You must continue to follow precautions for protecting your hip for 3 months following your surgery. In particular, make sure not to twist your hip and not to bend past 90 degrees.

If you have questions or concerns about how to protect your new hip during sexual relations, talk to your physiotherapist, occupational therapist or surgeon.

## 4.9 Dental work and medical procedures

It is important to tell your healthcare professional that you have had an arthroplasty before having dental work or undergoing any other medical procedures (particularly involving the bladder, prostate, lungs or colon). You may be put on antibiotics to prevent infection from moving through your bloodstream to your new joint. For 2 years following your surgery, preventive infection treatment is recommended for all dental work. After 2 years, preventive treatment is recommended for all invasive and bloody interventions (extractions, implants). Talk to your dentist or physician if you need more information.

## 4.10 Transportation

To get around after your surgery, call on friends or relatives, take a taxi or use, a public transportation service (ex. Para Transpo) for people who cannot take a regular bus. The public transportation service will pick you up and drop you off at appointments as needed. Make sure to find out if this service is offered in your municipality.

## 4.11 Driving

Your ability to drive will be reduced after your hip arthroplasty. First talk to your surgeon, physiotherapist or occupational therapist. When you will be able to start driving again depends on a number of factors. Here are the general restrictions:

- No driving for **a minimum of 6 weeks for total replacement.**
- No driving **a minimum of 3 weeks for resurfacing**
- No driving while you are still taking narcotics (morphine, hydromorphone, etc.);
- No driving until the physiotherapist has conducted a complete assessment of joint range of motion and strength of the operated limb.

For some surgeries, you will receive a copy of the Medical Conditions Report form sent to the Ministry of Transportation of Ontario and signed by your surgeon (if applicable). It will contain clear instructions on the restrictions you must respect.

## 4.12 Air travel

Talk to your surgeon if you must fly shortly after your surgery.

It is not recommended to travel by plane for at least 8 weeks after your surgery.

After surgery, air travel may require special precautions. Be sure to give yourself extra time when flying. Your new joint may set off airport metal detectors. To avoid awkward situations, inform the security agents before passing through detectors. Usually, you are not required to have a letter from your physician or photos of your x-rays.

If you are planning on flying less than 3 months after the arthroplasty, be sure to take several breaks to stretch in order to prevent serious complications. In the plane, do ankle exercises every hour to prevent blood clot formation. If, after your discharge from hospital, you need to fly home, ask the airline if medical documents are required.



## 5. Post-operative Complications

### 5.1 Infection

Less than 1% of patients contract a wound infection after surgery. However, an infection elsewhere in the body can reach the new joint through the bloodstream. Infection can start in your joint during surgery, in the hospital or from bacteria from another part of your body. People who contract an infection in the joint must often take antibiotics.

Here is how to prevent infection:

- Wash your hands often.
- Get in shape by following a healthy diet.
- Take the antibiotics you receive after the surgery.
- Avoid contact with people with colds or infections.
- Talk to your physician if you suspect or see signs of infection.

### 5.2 Swelling

It is likely that the operated leg will swell after surgery and during your recovery. The swelling may last a few weeks, even months. Your leg may swell a little more as you become more active. To reduce swelling :

- Elevate the operated leg (ideally 20 to 30 cm above the level of your heart). Lie down on your back and lift your legs (following the precautions given to you for your hip) by placing pillows under the entire length of your leg;
- Avoid sitting for long periods and do the ankle exercises described above every hour except at night;
- Be active for brief periods. Walk a few steps, rest, then start again;
- Place an icepack or bag of frozen peas or corn wrapped in a towel on your joint. Maximum 15 minutes an hour.

**Here are the signs of infection to watch for:**

#### **Infection of the incision**

- Redness extending beyond the contour of the wound;
- Unusual coloration or discharge (greenish, yellowish or foul-smelling pus);
- The wound and surrounding area are increasingly painful or swollen;
- Fever above 38°C or 100°F;
- Stitches falling off earlier than expected;

#### **Urinary infection**

- Pain when you urinate;
- Frequent or urgent need to urinate;
- Foul-smelling urine;
- Fever above 38°C or 100°F;

#### **Sore throat or chest infection**

- Swollen lymph nodes in the neck, pain when swallowing;
- Frequent coughing, yellowish or greenish sputum, shortness of breath;
- Fever above 38°C or 100°F.

### 5.3 Blood clots

In rare cases, blood clots can form after surgery, generally in the deep veins of the legs. These blood clots can detach and lead to serious health risks. This phenomenon is more common among people with heart or blood circulation problems, who are inactive or who are overweight or have other health problems like diabetes. The signs and symptoms are:

- Red and painful calf;
- Abnormal swelling of the operated leg.

If this is the case, **inform your family physician or surgeon immediately.**

If you have the following symptoms, call **911 immediately:**

- Shortness of breath;
- Sudden chest pains.

### 5.4 Anemia (low blood count)

You may lose a considerable amount of blood depending on the type of surgery you have. Anemia is characterized by a reduced hemoglobin count (molecule that transports oxygen in the blood). The symptoms of anemia are:

- Dizziness or faintness;
- Nausea or headaches;
- Great fatigue or weakness;
- Rapid pulse or shortness of breath.

If you present symptoms of anemia, consult your family physician. You may require iron supplements and/or a blood transfusion.

### 5.5 Post-operative delirium

Sometimes, elderly patients experience a period of confusion or delirium after surgery. They may act or talk strangely. Delirium usually disappears in a few days, but sometimes it can persist for a few weeks. Some of the common causes of delirium include the side effects of anesthetics and medication, lack of sleep, pain, infection, alcohol withdrawal, constipation or low oxygen levels. The healthcare team will try to find and correct the cause of the delirium.

### 5.6 Skin complications

A decubitus ulcer (commonly referred to as a bedsore or pressure sore) can occur among patients who are in bed for long periods. It is possible to prevent this complication by using good skin care techniques. A healthy and balanced diet and adequate hydration also help to maintain healthy skin and prevent pressure wounds.

### 5.7 Joint Loosening

Over many years, the bond between the joint replacement and your bone may loosen. This can cause pain and make it difficult for you to move your artificial joint. To reduce the risk of this complication, avoid high-impact physical activities. If you notice increased pain in your artificial joint, talk to your doctor as soon as possible.

### 5.8 Hip Joint Dislocation

Call 911 if your leg is suddenly extremely painful, shortens and the hip cannot be moved.

## 6. Exercises and daily activities

### 6.1 Physiotherapy

Physical activity plays a very important role in your recovery. It not only improves joint function, but also helps to clear your lungs, reduce the risk of leg clots, relieve pain and promote healthy bowel function.

The hospital's physiotherapist will advise you on how to obtain physiotherapy services once you are home. Depending on your needs, where you live and the services available in your area, your appointment may be at a physiotherapy clinic, hospital outpatient department or rehabilitation centre, or you may receive care at home. This follow-up generally occurs between the 4th and 6th week after your surgery to adjust walking aids and the number of exercise repetitions. From the 6th week after your surgery, your physiotherapist will adapt your exercise program according to how your condition has progressed.

Your physiotherapist will give you exercises to stretch and strengthen your legs and improve your walking and balance. As you recover, the exercises will get harder. With these exercises, you will learn how to use your new

joint and become more autonomous. It is important to do them for at least a year after your surgery.

Talk to your physiotherapist if you have questions about your exercises or concerns about your progress.

Before your discharge, be sure to set up an appointment at a physiotherapy clinic.

## 6.2 Hip Precautions

After Hip Surgery, you will need to follow **Hip Precaution** for **about 6 - 12 weeks** unless otherwise advised by your surgeon. These activity restrictions will help your joint to heal and reduce the risk of hip dislocation.

To find out more about the procedures and approaches you need to follow, visit the Montfort website, in the "Orthopaedic surgery" category, and find under the video capsule of the operation you've just performed the information. These are: "Occupational therapy - precautions to be taken for hip arthroplasty with lateral and posterior approach" and: "Occupational therapy - precautions to be taken for hip arthroplasty with anterior approach".

## 6.3 Returning to work

Allow yourself time to recover from surgery and focus on your rehabilitation before returning to work. Some people return to some form of work quickly after surgery but others need a longer time to heal and recover. This depends on factors such as health status and the type of work you do. Talk to a health care professional, such as an occupational therapist, about what is right for you.

**Review your workstation before surgery so that you can make the necessary adjustments before you return to work.**

### Work environment adaptations

- **Chair:** Choose a standard chair for sitting. Avoid chairs with wheels; they can roll away from you when you are getting up. Use your high-density foam cushion or blocs to increase the seat height if necessary.
- **Desk:** Position your phone, paperwork and computer close to you.
- **Keyboard Tray:** If you have raised your chair and your desk is too low, use a height-adjustable keyboard tray so that you can sit comfortably while typing.
- **Schedule:** Plan lots of stretch breaks. Get up and move around frequently. Avoid sitting in the same position for more than 45 minutes at a time.
- **Bathroom:** Check the height of the toilets at the office and the location of grab bars.

## 7. Follow-up with your surgeon

You will have a follow-up appointment with your surgeon 2 weeks after your surgery, following your return home, to check the wound, remove stitches/staples and renew prescriptions, if necessary.

You should also make an appointment with your family physician, once you have recovered, for a general health check-up. Your surgical report will be sent to your family physician as needed.

## 8. When to seek emergency care?

**Dial 911 if you:**

- have sudden intense pain in the operated leg
- are unable to move the operated leg
- have shortening of the leg
- have sudden chest pain
- have sudden shortness of breath

## From the day of your surgery until your discharge

### Assessment

- We will check your temperature, blood pressure, pulse and oxygen level before the surgery and frequently throughout the day.
- We will also be assessing your pain levels. We use a scale and will be asking you to rate your pain from 0 (no pain) to 10 (worst pain).
- We will frequently examine the color, sensations and movements of the operated leg.
- We will be looking at your dressing frequently to make sure it is not draining too much through the bandages.
- We will be asking you and recording how much you drink and how much you urinate.

### Tests

- The doctor may order some blood work before and after the surgery.

### Medications

- You will have an intravenous catheter and we will give you fluids.
- The nurse will give you your medications as ordered by the doctor.
- You will receive an antibiotic to prevent infection.
- You may be prescribed an anticoagulant (in pill or injection form) to reduce the risk of a blood clot.

### Nutrition

- You will be allowed to drink clear fluids (fluids you can see through, like water) after your surgery.
- You may be able to drink or eat regular food as tolerated.

### Activity

- The nurse will help you move, position in bed or get up to use the commode as needed.
- You must keep a pillow between your legs when are lying or turning over in bed.
- The team will keep reminding you about the hip precautions you need to follow. **Do not try** to get out of bed by yourself – always have a member of our team assist you.
- you will see a physiotherapist a few hours after surgery to help you with mobilization, exercises and stairs before going home

### **Treatment**

- We will ask you to take deep breaths and cough. This exercise helps clear your lungs and prevent pneumonia.
- You will be encouraged to use the toilet, commode or urinal to empty your bladder as soon as you feel the need. Make sure you have a nurse assist you.
- We will be monitoring the volume of urine in your bladder using a bladder scan.
- We will ask you to pump your ankles and feet 2 to 3 times per day while you are awake. This helps prevent blood clots from developing and keeps your muscles active.
- If you're admitted to hospital and while in bed, you will be wearing a portable intermittent pneumatic compression device (IPCD) on your legs to help with blood circulation and prevent blood clots from developing in your legs (deep venous thrombosis) or lungs (pulmonary embolism).

### **Education**

- The nurse will make sure that you know how to do deep breathing and coughing exercises and the ankle pumping exercises.
- The nurse will talk to you about managing your pain.
- The nurse will make sure that you and your family understand the hip precautions to be followed.

### **Discharge planning**

- The nurse will review information with you and your family about your home situation and your plans for discharge. If you need help planning your discharge, we can arrange for you to meet with a social worker.

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**Warning**

This guide does not replace the advice of your care provider.

Please consult your care provider to assess if the information presented in this guide applies to your situation.

The content of this guide was prepared by Vancouver Coastal Health and adapted by Hôpital Montfort.

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