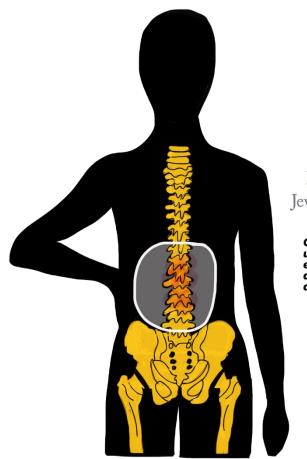
# **Back surgery:**

## A guide to your recovery





Centre intégré universitaire de santé et de services sociaux du Centre-Ouestde-l'Île-de-Montréal



This booklet was created in January 2021 by the multidisciplinary neuroscience team at the Jewish General Hospital. The team includes nurses, allied health professionals and physicians in collaboration with patient partners.

#### **NOTE:**

This information should not be considered as medical advice. It is not to be used in place of a visit with a doctor, nurse or other healthcare professional. If you have questions about your individual medical situation, please consult with your healthcare professional.

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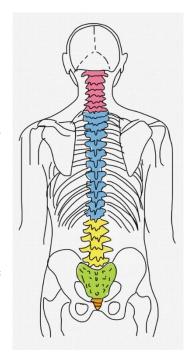
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## Introduction

## The spine

- The spine is the central structure of the back and is formed with **33 vertebrae**.
- In between the vertebrae, there are discs that act as cushions, or shock absorbers for the spine. There are also ligaments and muscles that help keep the vertebrae in the correct position.
- The spinal cord passes in a canal of the spine called the spinal canal. The spinal cord transmits information between the brain and the body. There are 31 pairs of nerves attached to the spinal cord.



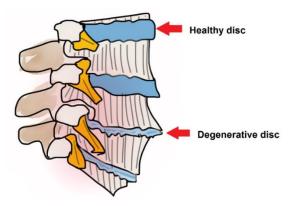
#### Some definitions

- **Same-day surgery:** you will be operated and will leave the hospital afterwards. You will not require an overnight stay at the hospital.
- **Surgery with hospitalization:** in general, you arrive to the hospital the night before the surgery (after 6 pm) and will be admitted. The length of your stay will depend on the type of surgery and your recovery.
- **Under observation:** you will stay at the hospital in an observation area after your surgery. This may last a few hours or may require an overnight stay, but you will not be admitted to a patient unit.

## Conditions of the spine

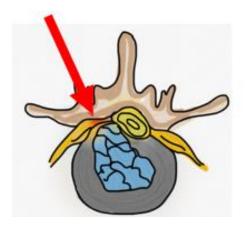
## Degenerative disc disease

Damage from wear and tear on the discs between the vertebrae.



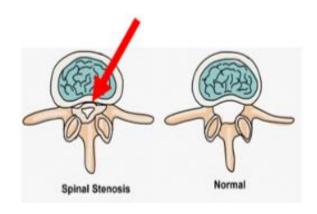
### **Herniated disc**

Injury or displacement of the disc located between the vertebrae.



### **Spinal Stenosis**

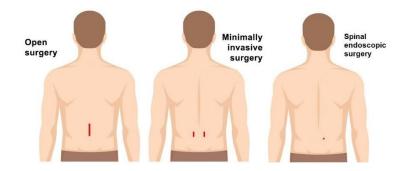
Narrowing of a part of the canal in the spine through which the spinal cord passes.



## Techniques of back surgery

The techniques of back surgery performed at the Jewish General Hospital are:

- 1. Open surgery (traditional surgery)
- 2. Minimally invasive surgery
- 3. Endoscopic surgery
- 4. Combination of these techniques

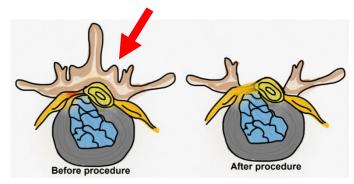


## Types of back surgery

The most frequent types of back surgery are:

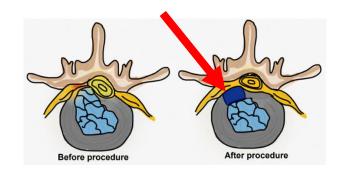
## Laminectomy

The removal of part or all of the bone of the vertebrae, called **lamina**. The purpose of this surgery is to expand the spinal canal, relieving pressure on the compressed nerves.



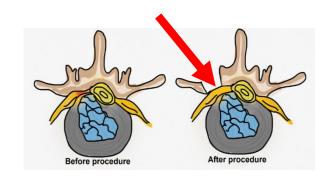
## **Discectomy**

The removal of a part or all of a **spinal disc**. The purpose of this surgery is to relieve compression of the nerves in the spinal cord caused by a damaged disc.



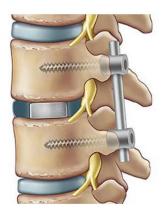
## **Foraminotomy**

The procedure expands the spinal canal, called the **foramen**, through which nerves in the spinal cord pass. The purpose of this surgery is to create a larger opening of the canal and to relieve the compressed nerves.



## **Spinal fusion**

To fuse together (combine) two or more vertebrae so that they heal into a single, solid bone. Bone grafts and hardware (metal screws, plates and rods) are added to help stabilize the spine.



## Before your surgery

When you decide with your doctor to have surgery, you will be asked to sign the **consent form**. Make sure you understand all the risks and benefits of the surgery and ask your questions before agreeing to sign the consent form.

You will get a call for an appointment with the pre-admission team. During this appointment:

- You will be asked information about your health condition, lifestyle habits, past medical history, emergency contact information and medications (please bring a list of your medications with you).
- You may have tests such as: electrocardiogram, chest x-ray, swab samples and blood tests.
- You will be guided to see other specialists before the surgery, if needed.
- The nurse from the Neurosurgery Clinic will provide you with the information you need to know about your surgery.



## **Preparing for your surgery**

- Eat a healthy diet and keep active and exercise on a regular basis
- Take your medication as prescribed, including blood thinner medications
- Stop or reduce smoking; do not smoke after midnight the day of your surgery
- Do not take drugs and alcohol
- Do not take natural products, vitamins or medicinal teas 2 weeks before surgery
- Plan for help you when you return home after your surgery

#### You are not allowed to leave the hospital alone. You cannot take a TAXI home by yourself.

**In the week before surgery**: If you are feeling unwell (e.g. you have a cold or fever, or there are changes in your physical condition), please contact the Neurosurgery Clinic immediately.

**Confirmation phone call from the Admitting Department:** The day before your surgery, you will receive a call before 4pm to confirm the date, hour, location and instructions related to your surgery. If you do not receive the confirmation call, please call 514-340-8222, ext. 28211.

## Personal belongings to bring to the hospital

- Please bring the following:
  - ✓ Your Health Insurance Card and your hospital card
  - ✓ Updated medication list
  - ✓ Your medications in their original containers
  - ✓ Your toiletries and personal items (including a pair of sneakers)
  - ✓ CPAP (sleep apnea) machine (if you have one)
  - ✓ This booklet
- <u>Do not bring valuable belongings</u> as the hospital is not responsible for lost or stolen items.



### Before the surgery

- Remove eyeglasses, contact lenses, nail polish, makeup and jewellery.
- We strongly advise not to smoke after midnight before the day of your surgery. This will help to reduce coughing and smoking-related inflammation after the surgery.

#### Same-day surgery:

- You need to come to hospital on the same day as the surgery.
- The pre-admission team or your local pharmacy will give you antiseptic sponges (Chlorhexidine 4%). You will use them for your showers the day before and the morning of the surgery according to the instructions provided.
- Do not put any products on your body after the shower (cream, deodorant).
- Change your bed sheets and wear clean clothes after your shower.
- Remain fasting (no food or drinks) after midnight.

### Surgery with hospitalization:

- You need to come to the hospital the day before surgery.
- You will take two showers with antiseptic soap (Chlorhexidine 4%): one the night before and the second on the morning of your surgery.
- The nurse will give you the proper sized compression stockings to prevent blood clots during and after the surgery.
- Remain fasting (no food or drinks) after midnight.
- You may take some of your morning medications with sips of water under the supervision of your nurse.
- After your morning shower, you need to wear a clean hospital gown, the compression stockings, your ID bracelet and possibly an allergy bracelet.

## Your surgery

### In the operating room

- You will meet the anesthesiologist and the surgical team.
- You will be asleep during the entire surgery.
- Your loved ones can wait for you in the waiting room on the first floor of Pavilion K (K1601). They will receive a phone number to the main recovery room and a time when they will be able to call to receive an update.
- Your loved ones will be able to see you when you go to your room.



## In the Recovery Room

After surgery, you will wake up in the recovery room.

- The nurse will take your blood pressure, pulse, and oxygen levels. She will check your surgical site dressing.
- You will have an intravenous line where they can give you fluids and medications.
- You may have an oxygen mask and a urinary catheter.



## After your surgery

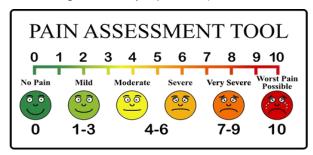
## **Symptoms**

It is normal to feel the following symptoms after surgery:

#### **Pain**

It is normal to have pain for a few days after surgery. This pain can be managed with medications for a better recovery. Before giving you pain medication, your nurse will ask you the following questions:

- Can you describe your pain? What type of pain?
- Where is your pain?
- From 0 (no pain) to 10 (worst pain), how would you rate your pain?
- Do you have other signs and symptoms (nausea, vomiting, etc.)?



Patient-controlled analgesia (PCA): It is a method that allows you to relieve your pain yourself after the surgery. A pump is attached to a tube that is inserted in the vein of your arm. The pump has also a remote where you can give yourself pain medication by pressing the button. This treatment is safe and can treat your pain rapidly.

#### Nausea

You may feel unwell and want to vomit. Let your nurse know. There are medications that can help.

## Same-day surgery patients

If you have same-day surgery, you will be authorized to leave the hospital if:

- Your pain is well controlled
- You are able to walk with help
- You urinated

## **Hospitalized patients**

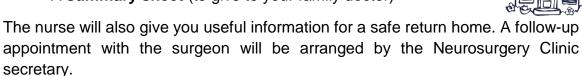
- You will be transferred to a room until you are ready to go home.
- Every patient's recovery is different. Not every patient will stay in the hospital for the same amount of time.
- We encourage you to get out of bed as early as possible, move with assistance and drink lots of fluids, except when not advised by your doctor.
- You can expect to meet many people during your stay: doctors, nurses, orderlies, physiotherapists, occupational therapists, dieticians, social workers, students and volunteers.
- It is very important that you use the spirometer to prevent breathing issues. Using the spirometer involves sucking in air as if you were using a straw for as long as as you can, ten times every hour while you are awake.



## **Returning Home**

On the day of your return home, you will be given an envelope containing:

- The **prescription** of your medications (for your pharmacy)
- A prescription for the CLSC to remove staples or sutures
- A summary sheet (to give to your family doctor)



#### **Pain**

You may feel pain after your surgery. It is important to control your pain in order to be able to eat, sleep and move around.

#### To manage pain:

- Take prescribed medications when you feel your pain is getting worse.
- Take pain medication 1 hour before doing activities that can be painful.
- Stop activities if they are too painful.
- If you are not able to manage your pain, please call the Neurosurgery Clinic at 514-340-8222 ext. 23057.



## **Urinating**

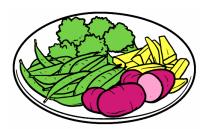
- After your surgery, you may have difficulty urinating.
- Please look for signs of hesitancy during urination, burning sensations while you urinate or discomfort in your bladder. If you have issues, please contact the Neurosurgery Clinic at 514-340-8222 ext. 23057 or your local CLSC.

#### **Diet**

A well-balanced diet is recommended after surgery. Having a generous amount of protein in your meals can help your wound heal. It is also important to have fiber in your diet to prevent constipation. Constipation is caused by the effects of anesthesia and pain medication, as well as being less active.

#### To prevent constipation:

- Eat high fiber foods (e.g. prunes, dark leafy vegetables, fruits)
- Drink lots of water
- Take prescribed laxatives
- Stay active (e.g. walking)



## Other symptoms

Changes in sensation or other symptoms can be normal after surgery because of the swelling. These changes should get better over time. If they do not get better or you are having new symptoms, please call the Neurosurgery Clinic at 514-340-8222 ext. 23057.

## **Incision and dressing**

Your back wound will be closed using either surgical glue, stitches or staples. Please keep the wound dry at all times. You can shower 3 to 5 days after surgery as long as you keep the **dressing completely dry**. You can put a plastic bag over the wound and tape the edges to prevent water from leaking onto the dressing. If it gets wet, you will need to change the dressing, which you can buy in advance at your local pharmacy. Also, remember that you should never rub your incision.

#### Surgical glue

- Check the dressing daily for any signs of drainage. If you live alone, you can use a mirror to examine your wound.
- The dressing can be removed 7 days after surgery by a family member or friend of you are unable to do so.

#### **Staples or stitches**

 A CLSC referral will be sent for the removal of staples or stitches and for wound care if necessary. Once the staples or stitches have been removed, you no longer need a dressing over your wound.

#### Things to look for

- Redness and swelling at the wound site
- Increasing pain
- · Fever or shivering
- Fluid leaking from the dressing
- Strange smell from the wound
- · Bump on the wound that gets bigger



### Possible complications

Complications can occur after surgery. Even though they may not occur, it is important to know these complications and to call the **Neurosurgery Clinic** at **514-340-8222** ext. **23057** if you think you have any of the following issues:

- · Incision is red, warm and has any sort of drainage
- Increasing pain, severe headache (not relieved by medication)
- Increasing numbness, weakness in your legs
- Persistent nausea or vomiting
- New bladder or bowel problems



If you have possible complications and you are unable to reach the Neurosurgery Clinic, go to the Jewish General Hospital Emergency Department or the nearest Emergency Department. You can also call Info-Santé (811) at all times.

## Things to consider

- Do not bend or twist your back repeatedly
- Do not lift objects that are more than 5 pounds or 2.5 kg
- Do not drive if you are taking pain medications (narcotics, muscle relaxant, etc.). These medications can cause drowsiness.

#### Ask your doctor, as needed, when you can:

- Start driving again
- Start sexual activities
- Do sports
- Go back to work (usually 4-6 weeks)
- Start travelling
- Restart taking aspirin or anti-inflammatory medications, if you were taking them before.

#### For 6 weeks:

- Do not immerse in water (e.g. no baths, no swimming)
- You can take a shower
- Have someone do your grocery shopping
- Avoid heavy household tasks (vacuuming, washing floors, etc.)
- Avoid any extreme activities or exercises
- Allow yourself to take breaks and rest when you need to.

## Follow-up appointment

 The follow-up appointment with the surgeon is given by the Neurosurgery Clinic secretary. It is usually 6 weeks after surgery. If you are having issues or complications, please call 514-340-8222 ext. 23057 or email the clinic at neurosurgery@jgh.mcgill.ca.



 The nurse at the Neurosurgery Clinic may also call you 2-3 days after your return home to make sure everything is going well. You can also call the clinic for any questions.

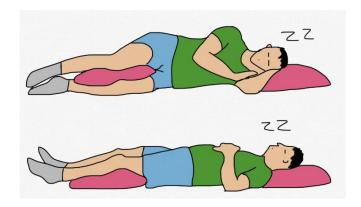
## Moving around after back surgery

We encourage you to move as soon and as often as possible, but taking care not to over-exert yourself. Please avoid bending, twisting your spine and lifting more than 5 pounds or 2.5 kg. Try to take a walk a few times a day. Please continue to follow these instructions until your doctor says otherwise at your next appointment.

### Sleep positioning

On your **side**: place a pillow between your knees to maintain proper alignment of your spine. The pillow prevents twisting of the lower back.

On your **back:** place a pillow under your knees to maintain proper alignment of your spine.



### Getting into and out of bed

#### Into bed:

- 1. Sit close to the head of the bed.
- 2. Lower yourself onto your side, using your arms to control your body. At the same time, bend your knees and pull your legs onto the bed.
- 3. Roll onto your back, keeping your shoulders and knees in the same direction.

#### Out of bed:

- While lying on your back, bend your knees.
- 2. Place one arm across chest (towards turning side).
- Move slowly to avoid twisting the spine. Roll in one movement towards the straight arm. Your shoulders and knees should always be in the same direction.
- 4. Once on your side, drop your legs off the bed.
- 5. Using this momentum, push yourself up off the bed into a sitting position.
- 6. Using your arms to push off of the bed, and your legs to push off the ground, push yourself into a standing position.



If you have been told to wear a brace after your surgery, make sure it is on properly <u>before</u> getting out of bed; you will receive instructions as to how and when to apply the brace.

## Getting into and out of a chair

#### Sitting down in a chair:

- Back up until you feel the chair against the back of your knees.
- · Reach back for the armrests with both hands.
- · Lower yourself slowly into the chair, keeping your back straight.
- Maintain a neutral spine position using an ergonomic back support or a pillow.
- While seated, change your position every 20-50 minutes and stretch for 2 minutes as shown below.



### Getting up out of a chair:

- Make sure both feet are flat on the floor.
- Push off armrests with both hands.



### Getting in and out of a car

#### Getting into a car:

- Have someone position the seat so that it is not too low, and so that the back rest is straight up.
- Back up until you're as close to the car as possible.
- Reach for the back of the seat with one hand and the dashboard with the other.
- Don't hold onto the door for support!
- Sit down first, and then lift one leg at a time into the car.
- Turn slowly.

#### Getting out of a car:

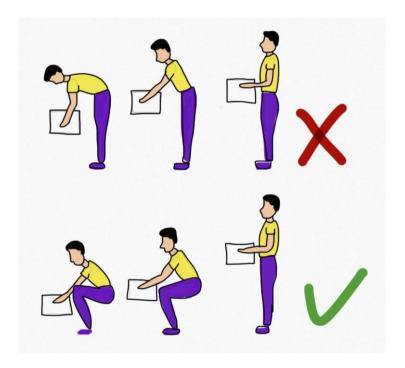
Reverse the sequence for getting into the car.



### Lifting techniques

#### **Basic body mechanics:**

- Hold objects close to you.
- Think before you lift. Think ahead to where the object is going to be placed and plan the path to get it there.
- Do not twist your back when carrying an object.
- Use two hands when possible.
- Push rather than pull.
- · Lift with your legs while keeping your back straight
- Organize your environment to avoid overreaching and bending.



For the first 4 weeks, do not to lift anything heavier than 5 pounds or 2.5 kg!

## Therapeutic walking

Moderate to fast walking has been shown to be generally therapeutic. Here are some guidelines for how to properly do so:

- 1. Keep your head up and centred with your eyes focused straight ahead.
- 2. Swing arms with each stride.
- 3. Each stride should feel natural -not too long or too short.
- 4. Start with 5 to 10 minutes each day and work up to 20 minutes 3 times a day if possible.

## Vacuuming / sweeping



The proper versus improper way to sweep and vacuum.



The step back and forth method of vacuuming avoids twisting of the spine.

## Bending over a sink

Do not bend over the sink. Lean slightly forward using your hips, bend your knees and counterbalance your weight using your free arm to lean on the sink as shown below.



## **Standing Position**

It is best to stand tall with your shoulders pulled slightly back and your feet shoulder width apart.



## **Important Information**

### Resources to quit smoking

#### **Smoking Cessation Centers (Centre d'abandon du tabagisme- CAT)**

- CLSC de Côte-des-Neiges: 514-735-8531 ext. 2850
- CLSC Métro: 514-934-0354 ext. 7399
- CLSC de Parc-Extension: 514-273-9591 ext. 6301
- CLSC de Benny-Farm and CLSC René-Cassin: 514-484-7878 ext. 1420

#### Helpline:

I Quit Now : 1-866-527-7383

#### Website:

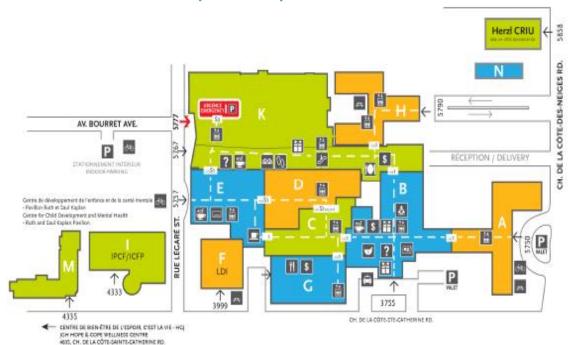
https://www.tobaccofreequebec.ca

#### **SMAT (Short Messages Against Tobacco)**:

- https://www.smat.ca/en
- **SMAT** is a text-message program to help you quit smoking. Sign up today and start receiving helpful tips and motivating text messages.



## **Jewish General Hospital Map**



#### **Contact Information**

If you have any questions or concerns, you may contact:

Neurosurgery Clinic: Pavilion E, 9th floor, room 929

Nurse at the Neurosurgery Clinic: 514-340-8222 ext. 23057

(Tuesday to Thursday 9:00 a.m. - 5:00 p.m.)

Secretary at the Neurosurgery Clinic: 514-340-8222 ext. 25171

E-mail: neurosurgery@jgh.mcgill.ca

#### For more online resources:

https://www.jgh.ca/care-services/surgery/neurosurgery/