

Spine Surgery



What to Expect and How to Prepare



MOUNT CARMEL

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Welcome

Thank you for choosing Mount Carmel to meet your healthcare needs. Our team of specialized health care professionals are dedicated to providing you with the highest quality care. This guide contains information to help you better understand the different aspects of your care and will be a helpful resource throughout your surgery and recovery.

Recovery from spinal surgery continues after you are discharged from the hospital. Because each patient responds differently, your care and exercise plan will be tailored to meet your needs. Please share your questions and concerns with your healthcare team.

Please review this book for information about:

- ▶ How to prepare for surgery
- ▶ What to expect during your hospital stay
- ▶ How to prepare for your recovery and discharge
- ▶ Activity after surgery

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The Spine and Spinal Surgery

Your spine supports your upper body and protects your spinal cord, which is the nerve center of the body. The spine is made of small bones (vertebrae) that are stacked on top of each other to create the spinal column.

A healthy spine forms an S-shape from the neck to the lower back. This curve helps to distribute the body's weight and helps the spine withstand stress.

The spine is made up of 3 sections:

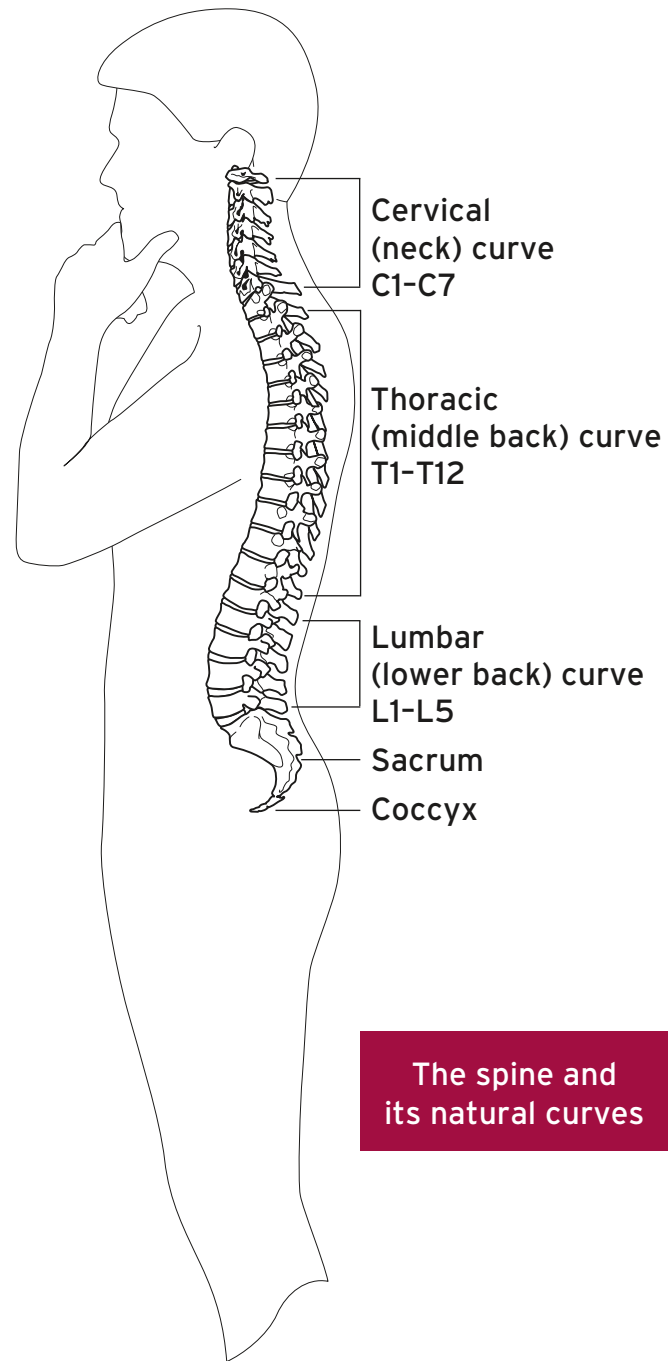
- The cervical spine (or neck) has 7 vertebrae — C1–C7.
- The thoracic spine (or chest) has 12 vertebrae — T1–T12.
- The lumbar spine (or lower back) has 5 vertebrae — L1–L5.

The lumbar spine is the hardest-working part of your spine because it carries the most weight and moves the most.

The vertebrae are separated by soft, gel-like cushions, called discs. Discs act as a "shock absorber" for the spine by helping to absorb pressure and keep the bones from rubbing against each other.

The discs between the vertebrae can wear down over time due to injury or aging. Without these "shock absorbers," pressure on the nerves of the spine can cause pain in the lower back and/or legs. Bone spurs may form and narrow the space through which the nerves pass. This may also lead to nerve irritation and pain.

Your doctor has recommended that you have spinal surgery to relieve the pressure on your spinal nerves. Surgery is needed when rest, medication, physical therapy, and/or exercise have not relieved your pain or improved your ability to carry out daily functions.



Common Spine and Disc Problems

Degenerative Disc Disease

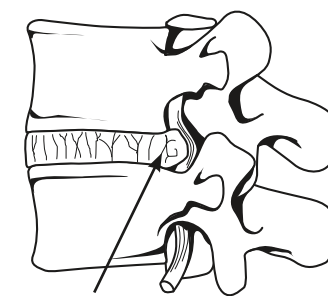
Degenerative disc disease is a condition in which the discs in your spine have been damaged or worn down due to aging or wear and tear.

Each disc has a spongy center surrounded by tough outer rings. When a disc weakens, the outer rings may not be able to contain the material in the center of the disc. When this material bulges against, or squeezes through, a weak spot or a tear in the outer rings, it creates pressure against the nerve, causing pain in your back and/or legs.

Bulging and Ruptured Discs

With a bulging disc, bone surfaces begin to rub against each other. This causes inflammation and pain. Bone spurs (calcium deposits) can also form, causing pain.

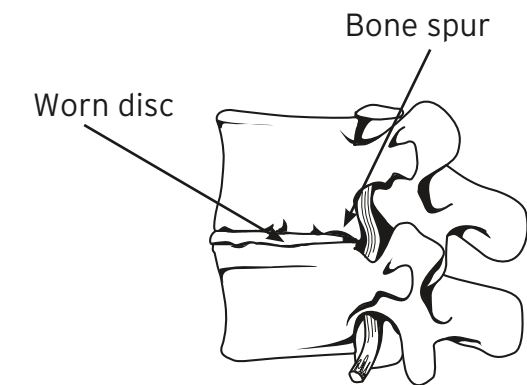
When a disc is ruptured (herniated), the spongy center squeezes through the tough outer rings, putting pressure on the nerves. Bulging and ruptured discs can cause severe pain.



Ruptured (herniated) disc

Arthritis and Bone Spurs

Arthritic bone surfaces begin to rub against each other. When this occurs, inflammation and bone spurs can form, causing pain. As bone spurs continue to grow, increased narrowing of the area through which nerves pass causes even more pain.

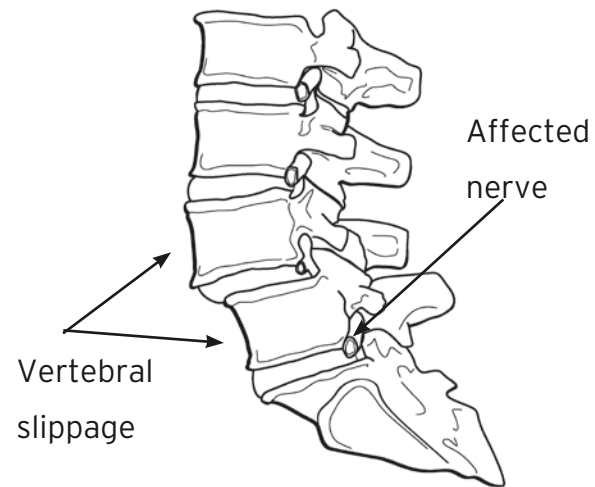


Spinal Instability

As the discs wear out and flatten, the vertebrae can slip back and forth. This slipping can cause the outer rings of the disc to stretch, causing pain, but also, more important, decreasing the protection for the spinal cord. Instability may also result from trauma or muscle paralysis.

Spondylolisthesis

Spondylolisthesis is a slippage of one vertebra, causing the spine to be out of alignment. This misalignment can pinch the nerves and cause pain.



Spinal Stenosis

Spinal stenosis is the narrowing of the canal where the spinal cord and nerves pass through. This may be caused by bony growth and/or bulging of the disc. This often occurs as we age. The narrowing creates pressure on the spinal cord and nerves, which may cause swelling, pain, numbness, tingling, or weakness.



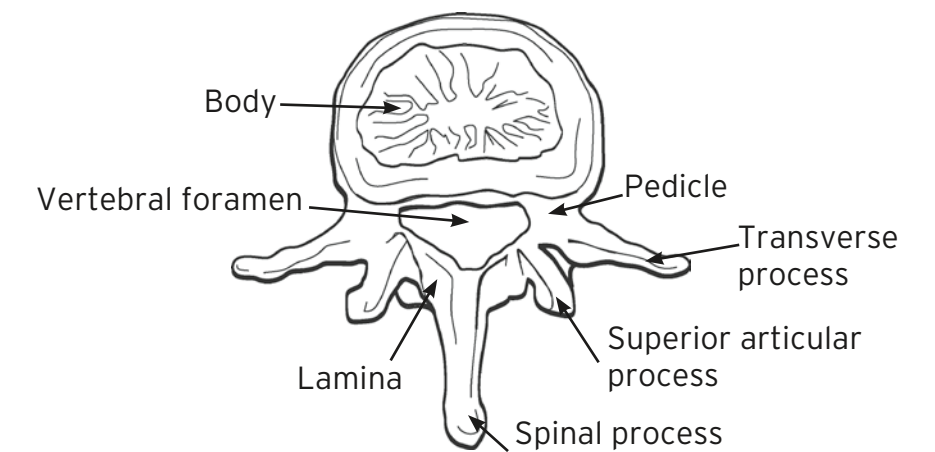
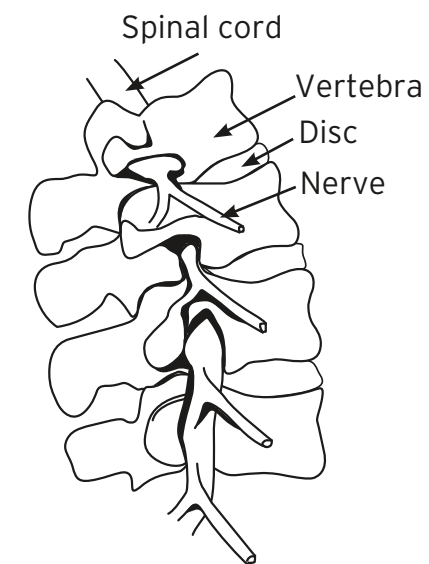
Understanding Your Surgery

You and your doctor have decided that surgery is the best option to relieve your back and/or leg pain. You may have one or more of these procedures done during your operation.

Lamina is a bony arch that is part of the vertebrae. It protects the spinal cord.

- **Laminotomy:** Removal of part of the lamina.
- **Laminectomy:** Removal of the entire lamina.
- **Foraminotomy:** Enlargement of the foramen where spinal nerves exit.
- **Facetectomy:** Removal of all or part of facet joint.

- **Discectomy:** Removal of part, or all, of a disc.
- **Cervical Corpectomy:** Removal of part of the vertebral body and the disc on both sides of the vertebral bone in the neck.
- **Fusion:** Stabilization of two or more vertebrae by joining them with bone grafts.
- **Fixation:** Metal plates, rods, and screws placed to improve the likelihood of bone fusion.



Surgical Consent

As with any major surgery, there are risks with spinal surgery. You will be asked to sign a surgical consent form before your surgery. This form gives consent to the surgeon to perform your surgery.

Before signing the consent form, make sure to ask any questions you may have so that you understand your surgery and its risks and benefits. It is important that you fully understand the information and are an active partner in your care.

Anesthesia

Anesthesia is medication that is used to control pain and make you comfortable during surgery. An anesthesiologist is a doctor specially trained to give anesthesia and monitor you during the procedure. Your anesthesiologist will meet with you before surgery to discuss your anesthesia options.

The type of anesthesia you receive will depend on the kind of surgery you are having and other factors, including your medical history. There are various types of anesthesia that may be used alone or together. They include:

General Anesthesia

General anesthesia is medicine that puts patients in a sleep-like state so they do not feel pain or remember the surgery. A breathing tube may be placed to support your breathing during general anesthesia. During the surgery, your heart rate, blood pressure, breathing and other vital signs will be carefully monitored.

Regional Anesthesia

Regional anesthesia involves the use of anesthetics and/or pain medication to block the feeling in a certain region of the body.

Before Your Surgery

Pre-admission Testing

All patients are required to have pre-admission testing before surgery. This is to assess your body's ability to tolerate the surgical procedure. It will include a review of your medical history, a physical exam, and blood tests. Please arrange to have this testing at the hospital pre-admission testing department or with your primary care doctor. Please check with your surgeon about their preference for pre-admission testing.

Testing must be completed **two to four weeks prior to surgery** (two weeks prior to surgery is preferred). This allows time for follow up testing to be completed as needed, such as a chest X-ray, EKG, or other testing. Tests cannot be used if they are completed more than 30 days prior to surgery and would need to be redone.

Medication

Your pre-admission testing appointment is the time to discuss the medications you are taking for your medical conditions (for example: diabetes, high blood pressure, acid reflux, chronic pain, asthma or other breathing problems). Bring a list of all of your medications, including prescription, over-the-counter, herbal products, and supplements.

You may be instructed to temporarily stop taking certain medications because they could complicate surgery or interfere with other medications you might need. This may include non-steroidal anti-inflammatory drugs (NSAIDs) such as aspirin or ibuprofen.

If you are taking blood-thinning medications for any reason — such as heart stents, atrial fibrillation, or previous blood clots — contact the doctor who prescribes them. You will need to discuss your upcoming surgery and whether the medication can be stopped before surgery.

If you have any questions about which of your medications to take before surgery, contact the doctor who prescribes them.

Advance Directives

Mount Carmel supports and complies with our patients' advance directives for medical care. In order to comply with your wishes, we will ask you about a Living Will or Health Care Power of Attorney. If you have one or both of these documents, please bring a copy to the hospital. If you do not have an advance directive and would like information about writing one, talk with your nurse.

Flu and Pneumonia Vaccinations

To keep you well and provide you with the fastest recovery, we recommend that you receive a flu and/or pneumonia (pneumococcal) vaccine before you have your surgery. You should receive the vaccine(s) at least 2 weeks before your surgery. You can contact your primary care doctor, pharmacy, or the local health department to get the vaccines. We will need to know the dates you received these vaccines.

Call your doctor if you have a fever, cold or flu symptoms, or any other changes to your health during the week before your surgery.

Dental Care

If you are in need of dental work, make certain to have it done well before your surgery. Bacteria from your gums can enter your blood stream and cause an infection. Do not schedule any dental work, including routine cleanings, for several weeks after your surgery.

Diet

Eat a well-balanced diet in the weeks before surgery. Be sure to include protein such as beef, chicken, fish, legumes, and eggs.

Skin Care

Any cuts, open sores, or rashes need to be treated and healed before surgery. If you have any of these skin problems, report them to your surgeon.

Smoking

Mount Carmel is tobacco- and smoke-free. The use of tobacco products — including cigarettes, electronic cigarettes, cigars, chewing tobacco, and pipes — is not allowed inside or outside any Mount Carmel buildings, properties, or parking structures.

If you are a smoker or tobacco user, it is important to quit at least a few weeks before surgery. Smoking greatly increases your risk of having complications after surgery including respiratory issues, pneumonia, delayed wound healing, and infections.

Talk with your doctor about quitting smoking and alternatives to smoking or tobacco products. Quitting smoking has a major impact on improving your health, and Mount Carmel supports your efforts to succeed. Ask a staff member for more information, call the Ohio Tobacco Quit Line at 800-QUIT NOW, or visit www.smokefree.gov.

Preparing for Your Surgery

Planning for Care After Surgery

The best place for you to recover from surgery is in your own home. Plan to have someone help you until you are safe with your daily routine.

There are times when other arrangements need to be made. If you live alone, your caregiver is unable to care for you, or you are having difficulty meeting physical therapy goals, your multidisciplinary health care team may make other recommendations. It may be necessary for you to have home health care or be discharged to a skilled nursing or rehabilitation facility. The case manager will work with you in the selection of a facility. They will also work with your insurance company to determine eligibility.

Driving

- Arrange to have someone drive you home or to the skilled nursing facility upon discharge from the hospital. Transportation costs will be your responsibility.
- A higher vehicle is easier to get into than one that is low to the ground.
- Do not drive after surgery until you are given permission from your surgeon. This may be several weeks. Do not drive while you are taking narcotic medications.
- You will also need someone to drive you to and from your follow-up appointments.

Home Preparations

For your safety, you or your family should:

- Make certain you have secure handrails along stairways and in the bathroom. Consider installing grab bars.
- Place a non-skid bath mat in your tub.
- Remove anything in your walking path that may cause you to trip or fall such as throw rugs, cords, and furniture.
- Have a straight-back chair with arms to sit in.
- Have a telephone within easy reach.
- Make sure that you have good lighting and that the light switch is within easy reach.
- Run errands and grocery shop before surgery.
- Stock up on food that is easy to prepare, and store it at waist to shoulder level to avoid bending and reaching.
- Make sure your pets can be out of your way when you return home.

Durable Medical Equipment (DME)

- Check with your surgeon about special equipment you may need after surgery, such as a wheeled walker, crutches, or a cane.
- Check with your insurance plan to find out which items will be covered. Some equipment may need your doctor's authorization, and not all equipment is covered by insurance.
- If you already have a brace or wheeled walker, plan to bring this to the hospital with you.

Packing for Your Hospital Stay

What to Bring

- A list of your medications and your preferred pharmacy information
- Your driver's license and insurance card
- Copy of Living Will and/or Health Care Power of Attorney
- Credit card or money for insurance co-payment
- Glasses, contacts, hearing aids, dentures, and cases
- CPAP or BiPAP
- Brace or walker
- Pair of non-skid shoes that are not tight — you may have swelling.
- One set of clothes — loose-fitting shirt and pants or shorts. If you wish to wear a robe, bring one that opens along the entire front and is no longer than calf length.

What Not to Bring

Please leave all valuables such as jewelry, keys, and electronic devices at home. After registering for your surgery, plan to give your purse/wallet, checkbook, credit cards, cell phone, and any other valuables to your support person to be responsible for these items. It is recommended that these items are taken home.

Leave your medications at home unless you have been instructed to bring them to the hospital.

Getting Ready for Surgery

A Few Days Before Surgery

You will receive multiple phone calls in the days leading up to your surgery. These calls are critical in helping to prepare for your surgery. A hospital staff member will contact you to verify information, including instructions on which medications you should take the morning of surgery.

- Follow all instructions given by your doctor.
- Call your doctor right away if there are any changes to your health before your surgery, including a cold or other infections.

The Day Before Surgery

Many details are involved in determining your final surgery time. Depending upon where your surgery will be performed, you will be notified of your arrival and surgery times either at your pre-admission testing appointment or by phone. You may receive a call with additional information or time changes up to the evening before surgery.

- Do not smoke, eat, drink, chew gum, or eat mints or candy starting after midnight the night before surgery until you are allowed to have fluids after surgery.
- Shower using a CHG solution the night before surgery. Follow the directions on the next page unless your surgeon gives you other instructions.

The Day of Surgery

Before you come to the hospital:

- Shower again using CHG solution.
- Remove all jewelry, including wedding bands and body piercings. You may replace body piercings with temporary plastic posts before coming to the hospital. If you have rings that will not come off, please tell a staff member.
- Do not wear makeup, perfume, powders, lotions, or creams.
- You may brush your teeth, but do not swallow the water.
- Wear glasses instead of contacts or bring a container to remove your contact lenses before surgery.
- If you have been told to take certain medications the morning of surgery, take them with a small sip of water.
- Do not smoke or use tobacco products before your surgery.

Preparing Your Skin with Chlorhexidine Gluconate (CHG) Solution

Infection is a risk with any surgery. Our care team takes every measure to protect you and to prevent infection while you are in our care. You play an important part in this.

To help reduce the risk of infection, before your surgery:

- Use a special soap to clean your body. The soap contains an antiseptic called *chlorhexidine gluconate* (CHG). Cleaning your body with CHG soap before surgery helps prevent infection.
- Do **not** shave near the surgical area as this can make it easier to get an infection.
- Put **clean** sheets on the bed you will be sleeping in the night before surgery.

The Night Before and Morning of Surgery

Your surgeon has directed that you use a Chlorhexidine product such as Hibiclens™, Dyna-Hex™, and others. Use **half** the bottle the night before and the **other half** the morning of your surgery.

Your doctor may instruct you to begin using CHG wash earlier. Follow your doctor's instructions.

Follow these steps as you shower:

- Shower or bathe as usual with soap and water. This will help remove dirt and oil that can prevent chlorhexidine from working correctly. Wash off the soap completely. If you plan to wash your hair, use regular shampoo on your hair and rinse well.

- Thoroughly rinse your entire body with warm water from the neck down. Turn off the water or step out from under the shower stream to avoid rinsing the CHG soap off too soon.
- Apply the CHG product directly to your skin from the neck down and wash gently. *Do **not** use above your neck, in your genital area, or on wounds that are deeper than a scratch. DO NOT touch your eyes, ears, or mouth while scrubbing.*
- Pay special attention to washing the area of your surgical procedure very well. Use a back and forth motion to gently scrub the area.

If you cannot reach your back, have someone wash it for you.

- Allow the product to soak on your skin for **2 to 3 minutes**.
- Turn on the water or step back under the shower stream to rinse well. Do not use regular soap after applying and rinsing the product.
- Pat your skin dry with a **clean** soft towel. Do not use any makeup, perfume, deodorant, powder, lotion or cream after you have showered.
- Put on **clean** nightwear or clothes.

**Repeat these steps the morning of your surgery.*

It is a good idea to read the label for full product information and precautions. Do not use this product if you are allergic to it. If your skin becomes red or irritated, stop using the solution and contact your surgeon for further instructions.



Your Surgery and Hospital Stay

The Patient Care Team

You are the most important member of the healthcare team. Your health and wellbeing is our highest priority. In our efforts to make your hospital stay as comfortable as possible, you will be asked your preferences during your time with us. Please let the healthcare team know if you have any questions or concerns.

There are many other members of the healthcare team who will be working with you. They will provide care, evaluate your progress, and communicate with each other and with you and your family.

Your surgeon, anesthesia provider, and primary care physician or hospitalist will manage your medical care. Your healthcare team will also include a team of specially trained nurses, patient care technicians, physical therapists, and occupational therapists to care for you as you recover from surgery.

A number of other clinicians will work with you to meet your healthcare needs. These may include respiratory therapists, dietitians, social workers, discharge planners, and nurse case managers.

Your Surgery Day

Registration

When you arrive at the hospital, go to Patient Registration. You will need to have your driver's license and insurance cards. You will receive a "find code" to ensure your privacy and confidentiality. This is a four-digit number that only you can give out to family or friends. It is important for you to know that anyone calling or asking how you are doing cannot be told any information unless he or she has this find code.

Pre-op

Once your paperwork is completed, you will be directed to the pre-operative area. You will change into a hospital gown. A nurse will start an IV line and take your blood pressure and temperature. One family member can be with you during this time.

The anesthesiologist will meet with you and review your health history. He or she will discuss the types of anesthesia that can be used. Once a decision is made, you will be asked to sign a surgery and anesthesia consent form. Please ask your surgeon or anesthesiologist any questions you have before your surgery.

Surgery

Your surgeon will tell you how long it should take to complete the surgery. Family members should not be alarmed if your surgery takes longer. Surgery times are sometimes delayed or changed due to emergencies or cancellations. Every attempt will be made to notify your family if your surgery is delayed.

Your family should wait in the surgery waiting room so they can receive updates throughout your surgery and recovery.

Post-Anesthesia Care

After surgery, you will go to the recovery room, also called the post-anesthesia care unit (PACU). This is where you will wake from anesthesia. You may have a dry mouth, nausea, itching, chills, or feel confused. Tell your nurse if you experience any of these symptoms. Also tell your nurse if you awaken with pain.

You may be given medication for pain and nausea. Most patients stay in the recovery room for 1 to 2 hours, although some patients require a longer stay.

Nursing Unit

After you have recovered from anesthesia you will be moved to the nursing unit, where your family will be able to visit. You will begin your therapy and make progress toward your discharge. Please make sure to let us know what we can do to make your stay more comfortable.

Plan of Care

Members of the care team will be checking on you to ensure your safety as you recover and progress.

Activity

Your first step in getting active again will be sitting on the side of the bed, followed by standing. Depending upon when you return to your room from surgery, you may be seen by the therapist that day. With the help of the therapist or another staff member, you will start to increase your activity. Walking soon after spinal surgery is one of the most important things that you can do to speed your recovery process. Early activity after spinal surgery also helps prevent many surgical complications, including:

- Infections
- Pneumonia
- Blood clots
- Urinary tract infections
- Urinary retention

The therapist will work with you on exercises, getting in and out of bed, walking and using stairs safely, and caring for yourself.

Call, Don't Fall

Always call for help before getting out of bed. A staff member should always help you while you are in the hospital. Preventing a fall is a key part of your safety and recovery.

Hand Hygiene

Preventing infection is important after surgery. One of the best ways to prevent infection is by washing your hands often — after using the bathroom, before meals, and before and after you touch your incision or change your dressing. Follow these five steps every time:

Wet your hands with clean, running water (warm or cold), turn off the tap, and apply soap.

Lather your hands by rubbing them together with the soap. Lather the backs of your hands, between your fingers, and under your nails.

Scrub your hands for at least 20 seconds.

Rinse your hands well under clean, running water.

Dry your hands using a clean towel or air dry them.

Soap and water are best, but an alcohol-based hand sanitizer that contains at least 60% alcohol can be used as long as your hands are not visibly soiled. Ask all visitors to wash their hands when they enter and leave your room. Don't be afraid to remind the staff about hand hygiene.

Medications

You will resume your regular medications once you are able to take them. Your doctor may also order other medications such as antibiotics, stool softeners, blood-thinners, pain medication or medicine for nausea. Ask your nurse for more information.

Treatments

- You will wear compression hose and may have compression pumps, also called sequential compression devices (SCDs), throughout your stay. The compression pumps are worn while you are in bed. Both help to prevent blood clots from forming in the legs.
- You may have a Foley catheter in your bladder to drain urine when you wake up from surgery. This will be removed as soon as possible.
- You may have a dressing (bandage) over your incision. The nursing staff will care for your incision, change your dressing, and teach you how to do this at home.
- You will have ice packs to help relieve swelling and pain.

Be sure to ask the staff any questions you have throughout your stay.

Diet

You will begin with ice chips. If you are able to tolerate these without nausea, you will progress to clear liquids such as broth, gelatin, Popsicles, and clear soda. Once your nurse feels your stomach is able to handle solids, you will be able to start your normal diet.

Breathing Exercises

You will be taught coughing and deep breathing exercises to help keep your lungs clear and prevent pneumonia. You will also be instructed on how to use an incentive spirometer:

- Just after you exhale normally, put your lips tightly around the mouthpiece.
- Breathe in as deeply as you can. The meter will rise.

- When you feel that you've taken a full breath, keep trying to breathe in more and more for about 2 seconds.
- Repeat this deep breath action **10 to 15 times each hour** while you are awake.

You can see how much air you have taken in by reading the number on the meter. Your breathing technique will improve as you are more awake, have less pain, and move around more. If you have trouble using the spirometer on your own, please ask your nurse for help.

Circulation Exercises

Exercise improves blood flow (circulation) and reduces the risk of blood clots. Exercising will also help you gain strength and mobility, and decrease your recovery time. After surgery, you will be instructed to do ankle pumps, quadriceps sets, and gluteal sets. Do each exercise 10 times every hour when you are awake (see page 21).

Managing Your Pain

After surgery, some pain is to be expected while your back is healing. You and your healthcare team will work together to manage your pain for a smoother recovery. Although we want your pain controlled, we do not want you too groggy or sedated so you are able to do your therapy.

You will be asked to rate your pain. This will help us know how your medication and other comfort measures are helping. You can use a number or choose a face on this scale that best rates your pain. Many people hesitate to report their pain and to take pain medication. It is most helpful to take pain medication before the pain becomes severe. If you wait too long to take pain medication, it becomes harder to get relief.

Your doctor and anesthesiologist will order medication to help manage your pain. This may include oral pain medication (pills) or intravenous (IV) pain medications. Your nurse will explain what medications are available to you and discuss other pain relief options.

Your pain medication may cause side effects such as nausea, itching, confusion, and constipation. Ask your nurse any questions you may have about side effects.

Talk to your healthcare team about other ways to relieve pain. Rest is not always the best solution, especially after surgery. Changing your position in bed and getting out of bed can make you more comfortable. Taking your mind off the pain by listening to music, watching TV, reading, or visiting with family and friends can also be helpful.

As you heal, your need for pain medication should decrease. Talk with your doctor if you have any questions or concerns about your pain management at any time during your recovery.



Activity After Your Surgery

Activity plays a key role in your recovery. Soon after surgery, your nurse or physical therapist will explain how you should get out of bed and will assist you.

The nurse or therapist will have you use a walker if you are unsteady on your feet. The physical therapist will help you learn how to use the wheeled walker if necessary.

As rehabilitation progresses, you will have less pain, and your activity level will increase. Your physical therapist will work with you to set up a walking plan. You'll also learn how to climb stairs.

Wearing a Brace

Your doctor may tell you ahead of time that you will need to wear a back brace after surgery. You will be given instructions on having the brace fitted prior to surgery. Be sure to bring the brace to the hospital the day of your surgery. You may not be told until after surgery that you will need a brace. Your nurse or therapist will show you how to wear the brace or corset if your doctor has ordered one for you.

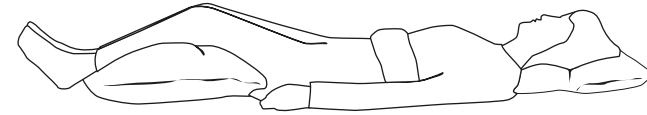
Walking

You will be helped out of bed the day of your surgery.

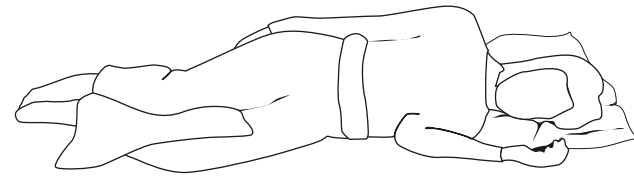
- You will walk in the halls several times a day. **Always** call for help whenever you get out of bed to walk.
- You will need to wear a back brace as ordered by your doctor.
- You may need to use a wheeled walker for balance after surgery. A physical therapist will work with you to show you how to use the walker if it is needed.

Sleeping Positions

Do not sleep on your stomach unless your doctor says it is okay.



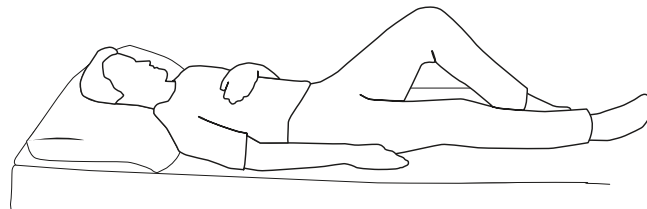
When sleeping on your back, place a pillow under your knees. A pillow with neck support and a roll (towel or thin blanket) around the waist are also helpful.



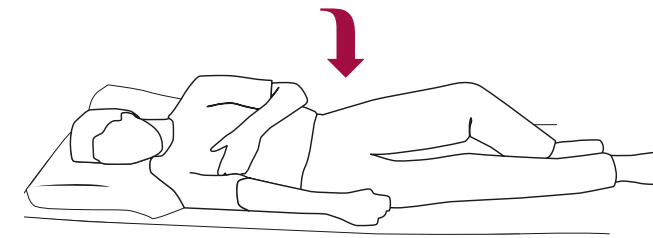
Place a pillow between your knees when lying on your side. Use neck and waist support as needed.

Log Rolling

You will be taught how to log roll from side to side and how to get out of bed. The purpose of log rolling is to avoid twisting the spine at the hips when moving in bed.



Bend your left knee and place your left arm across your chest.

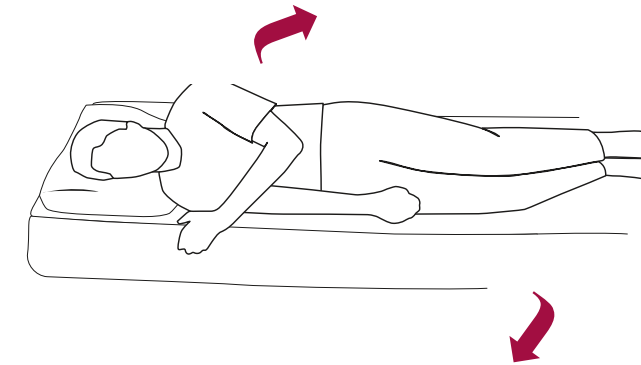


Roll all in one motion to the right. Always move in one unit. Reverse for rolling to the left.

Log roll every 2 hours while you are in bed to avoid stiffness.

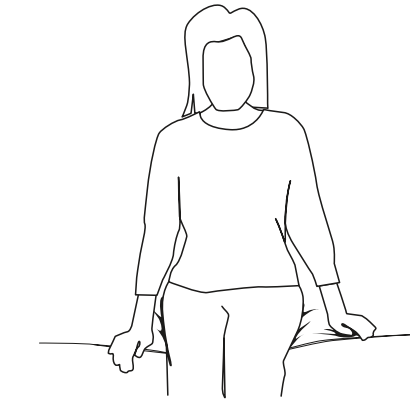
Getting Out of Bed

First log roll to your side.

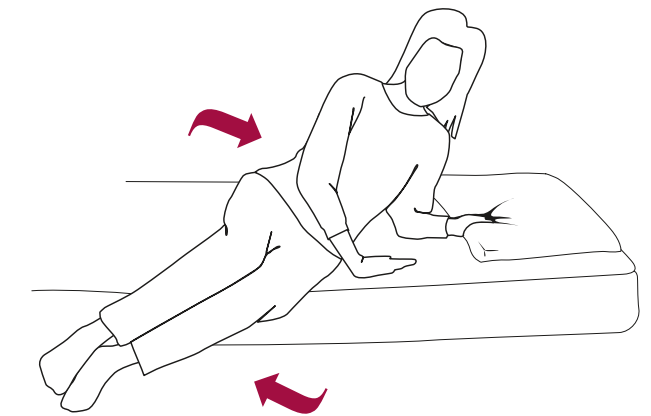


Then sit up by using your arms to push up and lowering your legs. Do not twist your back or trunk.

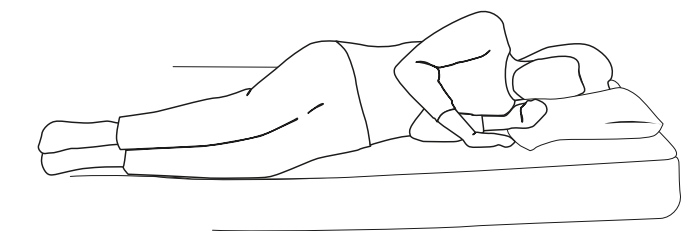
Getting Into Bed



Sit on the side.



Gently lower yourself using your arms for support and swinging your legs up onto the bed in one motion. Do not twist.



Sitting in a Chair

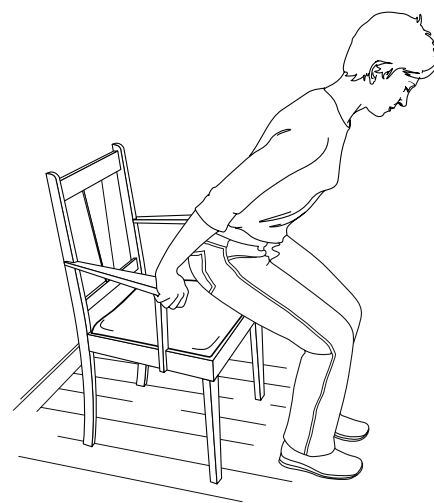
You will be helped out of bed as soon as possible after surgery. The first step is from the bed to a chair.

- You will be sitting in a chair for up to 30 minutes at a time. You can sit up longer as you are able, but you will need to change positions every 30 minutes.
- Sit in a stable chair with armrests.
- Avoid twisting or bending at the waist when sitting in the chair.



Getting Up from a Chair

- Scoot as close to the edge of the chair as possible.
- Place your feet firmly on the floor.
- Bend forward at the hips. Keep your back straight.
- Push off at the armrest while using your legs to stand.

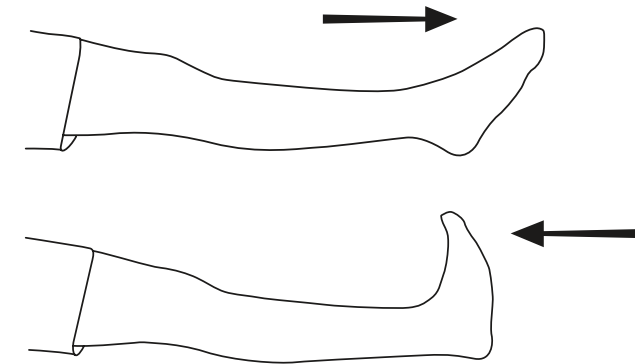


Circulation Exercises

Do the following exercises once you wake up from surgery and after you are home. These simple moves improve circulation and can help prevent blood clots.

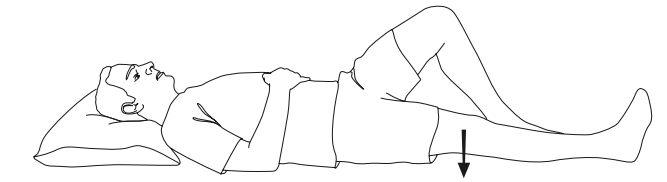
- Do each exercise 10 times each.
- Increase to 15 repetitions of each exercise.
- Do these every hour when you are awake.

Ankle Pumps (Both Legs)



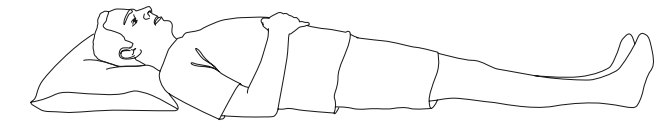
Move your foot up and down at the ankle — pointing your toes toward your body and away from your body.

Quadriceps Sets (Both Legs)



Push the back of your knee down against the bed and tighten the muscle on the front of your thigh. Hold for 5 seconds and relax.

Gluteal Sets



Tighten your buttock muscles. Hold for 5 seconds and relax.

Going Home

Discharge Process

Spinal surgery typically requires a short hospital stay. You may be discharged the same day as your surgery. You will continue to heal and recover at home.

Your surgeon and your general medical doctor will release you when you have met required medical and therapy goals. These include:

- Your oxygen level is adequate.
- You are able to urinate on your own.
- Your pain level is tolerable on oral medications.
- You are able to meet your therapy goals.

Please keep in mind that the discharge process may take time. Make sure to discuss your discharge goals with your health care team. Your case manager and nurse will work with you to coordinate discharge planning to meet your ongoing healthcare needs.

Your doctor may prescribe outpatient therapy, home therapy, or a therapy program that you do independently at home. If you have outpatient therapy, you will need someone to drive you to your therapy sessions. These are often two to three times a week.

It is important to have a family member with you on your day of discharge to see how you are doing with your care and activities, listen to your discharge instructions with you, and transport you home.

To help the discharge process go smoothly, please have your ride prearranged so you are able to go once your discharge is finalized.

Your Care at Home

You will be given written discharge instructions and prescriptions for any medications needed after discharge. The nursing staff will review these with you and your family member. If there is any information that you do not understand, please ask the staff before you leave.

Incision Care

Your incision may be closed with sutures, staples, or surgical glue. If you have sutures or staples, arrangements will be made to remove the staples in the doctor's office or by a home health nurse.

If you have Steri-Strips in place, allow them to fall off on their own. Do not pull them off.

You will be instructed how to change your dressing and care for your incision. You may shower when instructed to do so by your surgeon.

Do not take a tub bath. Keep your incision clean and dry. Do not use lotions, powders, or oils on your incision. Keep your incision open to air unless your surgeon instructs you to keep it covered with a bandage.

Check your incision in the morning and evening for signs of infection. Always wash your hands before checking it.

Call your surgeon right away to report any of the following signs of infection:

- The area around your incision is red or hot to touch.
- You have drainage or continued bleeding from the incision.

- You have drainage that is yellow or green colored and/or foul smelling.
- You have chills or a fever of 100.4° F or more.
- The edges of your incision start to separate.

Also notify your surgeon of any of the following symptoms:

- If you have new or a sudden increase in swelling or bruising around your incision.
- You have swelling of your hands or feet.
- You have numbness or tingling of your arms, hands, fingers, legs, or feet.
- You have severe pain even after taking your pain medication.
- You have pain, warmth, or redness to your calf (may indicate a blood clot).

Medications

Resume your regular medication as directed by your care team. The nursing staff will instruct you on any changes and on new medications, such as pain medications or blood thinners.

Check with your doctor about over-the-counter pain relief and anti-inflammatory medication. Do not take Tylenol and your prescribed pain medication together.

If you continue pain medications or iron supplements at home, you may need to take a stool softener to avoid constipation.

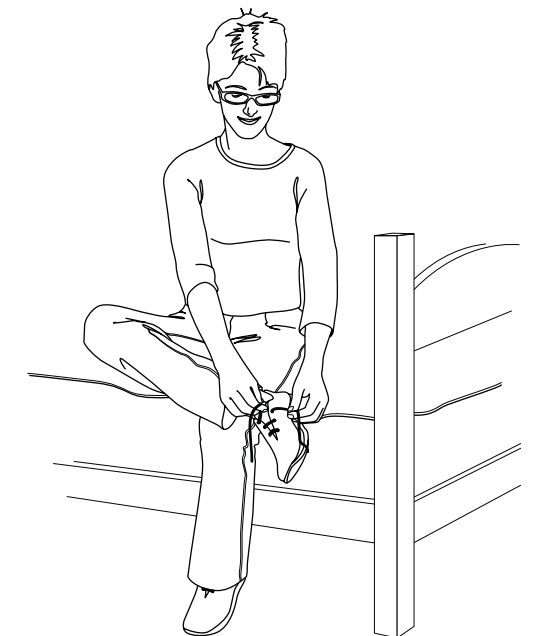
Getting Back to Your Daily Activities

Occupational Therapy

Occupational therapists may see you while you are in the hospital. They teach you how to do everyday activities while protecting your back. They can answer your questions about grooming, hygiene, and using equipment for bathing and dressing (if needed). The therapists may also discuss how to manage household activities and work and leisure activities. Please note that devices such as reachers are not covered by insurance or Medicare.

Getting Dressed

- Sit on a stable surface such as a chair or a firm bed where your feet are able to touch the floor.
- You may cross your leg to start clothing over your feet. If you are not able to bring your feet up to you, wear slip-on shoes, ask for help, or use devices such as a reacher, sock aid, or shoehorn.
- Do not bend over to reach your feet.



In the Bathroom

- Try not to lean over the sink.
- When brushing your teeth, use a glass of water to rinse your mouth, and spit into an empty glass.
- If you have trouble getting up from a low surface, you may need an elevated toilet seat. Talk with your therapist about this.

Bathing

- Showers are generally permitted, but not tub baths.
- If you don't feel safe getting into the shower, sit or stand at the sink to sponge bathe.
- Your discharge instructions should tell how to protect/care for your incision during showering.
- The first few times you shower, have a family member or caregiver stay close enough to assist if needed.
- Using a long-handled sponge or brush makes it easier to wash your legs and feet.

In the Kitchen

- Remember, in all of your activities, avoid bending, lifting, or twisting your back.
- Move items that you use often to within easy reach.
- Do not attempt household chores until you feel steady on your feet.
- Only attempt bending your knees to reach low items if your legs are strong enough for you to easily straighten up again.
- Do not lift anything over 10 pounds (1 gallon of milk weighs 8 pounds).
- Always hold items close to your body when you lift or carry them.
- Your provider will let you know when it is safe for you to lift more than 10 pounds.
- Avoid strenuous pushing and pulling.



Getting In and Out of a Car



Getting In

A taller vehicle is easier to get in and out of than one that is lower to the ground. You are safest sitting in the front seat with your seat belt on and the seat upright.

- Move the seat back as far as possible.
- Stand facing away from the car.
- Place one hand on the back of the seat and the other on a secure spot and slide onto the seat.
- Lower yourself slowly to the seat.
- You may need someone's help to lift and swing your legs in.

Getting Out

Have your helper place the walker close by. Pivot and lift your legs out of the car. You may need someone's help with this. Scoot to the edge of the seat, and with one hand on the back of the seat and the other on a secure spot, push to stand.

Car Safety

- Limit your time riding in the car. If you are riding longer than 30 minutes, take a break from sitting. Look for a safe place to park, get out of the car, and walk around.
- Always maintain good posture when riding in or driving a car.
- **Do not drive** until cleared by your surgeon. This may not be until 4 to 6 weeks after surgery. You should not drive while you are taking pain medication.

Returning to Work

Getting back to work depends on the speed of your recovery and the type of work you do. If your job involves a great deal of walking, standing, or physical labor, you may be off work for more than 6 weeks. The doctor and therapist will help you decide when you are ready to return to work.

What to Expect in the Future

Healing from surgery can take 6 to 12 weeks, but it will take much longer to make a full recovery. Talk to your surgeon about which activities are encouraged and what limitations you may have. Ask for recommendations about participating in activities that you previously enjoyed. Progress may take time, but completing the exercises as you are instructed will build your strength and endurance. Be patient with yourself, knowing that it will take time to reach the full benefit of spinal surgery.



MOUNT CARMEL

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