Lumbar Cervical Spine
Patient Surgery/Procedure Information

Johnson City Medical Center

Patient Name: ____________________________________________________________

Your Surgery Date: _______________________________________________________

Pre-Admission Testing (PAT) on: ______________________ at ___________________

Report to Same Day Surgery at Johnson City Medical Center.

Please bring this book with you to:
• The hospital
• Every doctor’s office visit
• Every outpatient physical therapy visit

Call the Spine Program coordinator at 423-431-6937 if you have any questions.

PLEASE KEEP THIS BOOK WITH YOU FOR REFERENCE.
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General Information
Welcome

This book was written to help you understand and prepare for the back or neck surgery that your doctor has recommended. This manual contains detailed information about anatomy, common back and neck problems, and treatment options for these problems. You will read about how to prepare for surgery, what takes place during the procedure and what to expect while you recuperate at the hospital and at home.

While The Spine Center has developed a comprehensive course of treatment, we believe that you play a key role in ensuring the best possible outcome. By educating and involving yourself in each step of the program, you will be well-prepared for a safe and successful recovery.

We have a team ready and waiting to help you through your procedure. This team includes doctors, physician assistants, nurses, physical and occupational therapists, pharmacists, dietitians, technicians and chaplains. Other team members may include social workers and case managers.

Don’t forget that these people know a lot about the challenges and stresses you may face, and are eager to answer your questions and help you in any way they can. Don’t be shy—ask questions! Your experience will go more smoothly if you are prepared and know what to expect.

Share this guidebook with your family. It will answer many of their questions, and may prompt you to think of more questions to ask your team.

The Purpose of the Guidebook

This guidebook was not designed to replace any information, instruction or treatment you receive from your doctors, physician assistants, nurses or therapists. It is meant only as a supplement to help you more fully understand the information you are currently receiving about your neck or back condition and treatment.

Preparation, education and good communication are essential to the success of your procedure. This guidebook is a communication and education tool for patients, families, doctors, nurses and therapists. The goal is for you to understand:

- What to expect every step of the way
- What you need to do during each phase of the treatment
- Care for your incision at home
- Exercises and tips to get you back to an active lifestyle

Remember, this is only a guide. Members of your healthcare team may add to or change some of the recommendations made in this book. Always take their recommendations first, and ask questions if you are unsure of any information.
Welcome to The Spine Center at Johnson City Medical Center

Our facility specializes in the diagnosis, treatment and care of people who have back and neck problems. Your team includes physicians, physician assistants, patient care partners, nurses, and physical and occupational therapists specializing in total spine care. Our highly trained nurses, technicians, pharmacists and therapists are dedicated to making your experience as pleasant and productive as possible.

Some features of The Spine Center include:
• A comprehensive guidebook
• A coordinated rehabilitation program
• Clear and concise patient education videos and brochures
• Free community education seminars about treatment for back and neck pain
• Nurses and therapists who specialize in the care of patients who have had back and neck surgery
• Unique “Wellness WalkWay” walking program

Johnson City Medical Center Campus Map

400 N. State of Franklin Rd.
Johnson City, TN 37604
423-431-6111
MountainStatesHealth.com/jcmc
Directions to Johnson City Medical Center

**From the North:** From I-26 East, take Exit 19 (State of Franklin Road, TN 381). Exit right onto State of Franklin Road. Proceed approximately three miles (crossing Market Street, US 11E). Johnson City Medical Center will be on your left.

**From the South:** From I-26 West, take Exit 24 (University Parkway, Elizabethton; US 321). At the stoplight, turn left onto US 321 South. This will be University Parkway. Proceed to State of Franklin Road at the 5th stoplight (following US 321) and turn left. After approximately one mile, Johnson City Medical Center will be on your right.

**From the East:** From US 321 South, proceed into Johnson City. This will become University Parkway just past I-26. Proceed under the interstate to State of Franklin Road (the 6th stoplight) (following US 321) and turn left. After approximately one mile, Johnson City Medical Center will be on your right.

**From the West:** US 321 North and US 11E North will become Market Street in Johnson City. Move to the right-hand lane and turn right at State of Franklin Road (TN 381 and US 321 North). Johnson City Medical Center will be on your left.
The following hotels offer discounted rates for family members of patients at Johnson City Medical Center. In order to receive the discounted rate listed, you must present the “Be Our Guest” packet or the family advocate business card (which is located in the packet of information) to the hotel upon registering. If you need to make arrangements prior to your hospitalization, call the Spine Program coordinator for additional assistance at 423-431-6937. Additionally, you may call the family advocate at 423-431-1652 if you would like assistance in making reservations.

Please note that discounted rates may not be honored during special event weekends (i.e., Race Week and Storytelling Week).

<table>
<thead>
<tr>
<th>Hotel</th>
<th>Phone</th>
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<tbody>
<tr>
<td>Hospital Guest House (VA Campus)</td>
<td>423-926-0233</td>
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<tr>
<td>Hampton Inn</td>
<td>423-929-8000</td>
</tr>
<tr>
<td>508 N. State of Franklin Rd.</td>
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</tr>
<tr>
<td>Best Western Hotel</td>
<td>423-282-2161</td>
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<tr>
<td>2406 N. Roan St.</td>
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<tr>
<td>Sleep Inn</td>
<td>423-915-0081</td>
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<tr>
<td>925 W. Oakland Ave.</td>
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<tr>
<td>Comfort Suites</td>
<td>423-610-0010</td>
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<tr>
<td>3118 Browns Mill Rd.</td>
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<tr>
<td>Comfort Inn</td>
<td>423-928-9600</td>
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<tr>
<td>1900 S. Roan St.</td>
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<tr>
<td>Ramada Limited</td>
<td>423-282-4011</td>
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<tr>
<td>2606 N. Roan St.</td>
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<tr>
<td>Holiday Inn</td>
<td>423-282-4611</td>
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<tr>
<td>101 Spring brook Dr.</td>
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<tr>
<td>Doubletree Inn</td>
<td>423-929-2000</td>
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<tr>
<td>211 Mockingbird Ln.</td>
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<tr>
<td>Super 8</td>
<td>423-282-8818</td>
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<tr>
<td>108 Wesley St.</td>
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<tr>
<td>Jameson Inn</td>
<td>423-282-0488</td>
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<tr>
<td>119 Pinnacle Dr.</td>
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<tr>
<td>Marriott Fairfield Inn</td>
<td>423-282-3335</td>
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<tr>
<td>207 E. Mountcastle Dr.</td>
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Spine Services Offered
At The Spine Center, we offer the following services:

- Cervical/thoracic/lumbar braces
- Diagnostic imaging services, including:
  - CT scan
  - MRI
  - Discography
  - Myelography
  - EMG (electrical study)
  - X-ray
- Durable Medical Equipment (DME)
- Home health services
- Laboratory services
- Outpatient physical therapy
- Surgical services
What You Should Bring to the Hospital

The most important item you should bring with you to the hospital is a list of your current medicines. Be sure to include the correct name, dosage and times you take them. Please include any over-the-counter medications, herbal supplements and vitamins.

We suggest that you bring some comfortable bed clothes, including a robe, pajamas or nightgown, and slippers. There are toiletries available; however, feel free to bring your own. You may also want to bring your own books and magazines.

Bring snug-fitting tank tops to wear under your back brace (for comfort), if you have a back brace ordered after surgery.

Valuables

The hospital does not assume responsibility for valuables. This includes jewelry, dentures, hearing aids, watches, wallets, purses, eyeglasses, contact lenses or any other personal items. If you should need items such as eyeglasses and hearing aids, keep them with you. When you go for your surgery, hand them over to a family member to hold, or deposit them in the hospital safe. Money is best left at home; however, you might want a few dollars for the newspaper, etc.
What is a durable power of attorney for healthcare?
It is a document used to give someone the right to make a decision for you. A durable power of attorney for healthcare lets you assign a person (called a healthcare agent, attorney-in-fact or proxy) to make healthcare decisions for you. This person can be the next of kin, an adult child, a friend or an acquaintance. A durable power of attorney for healthcare doesn’t allow someone to make financial decisions for you.

At your Pre-Admission Testing (PAT) appointment and on admission to the hospital, you will be asked if you have an advance directive. If you do, please bring copies of the documents to the hospital with you so they can become part of your medical record. Advance directives are not a requirement for hospital admission.

If you would like more information or forms for completing a Tennessee living will or Tennessee durable power of attorney for healthcare, please ask the admitting staff or your nurse.

What is an advance directive?
Advance directives are documents that express your wishes if you are very ill or unconscious. By completing an advance directive before you are very ill, you let your doctor know what you want. If you are already very ill, it gives your doctor a better idea of what you want if you are going to pass away within a short time.

There are different types of advance directives:

What is a living will?
It is a legal document that allows you to state that you want your death to be a natural death. The form lets you say that you don’t want to be kept alive in certain situations. Unlike a normal will, a living will says nothing about who gets your money when you pass away. It does allow you to avoid certain treatments and make decisions about your medical care.
Pre-Op Checklist
The Spine Center Team

The Spine Center team will be responsible for your care needs and assist you throughout your hospital experience.

The Spine Center team will:
- Obtain health database
- Assess and plan for your return home, including caregiver availability
- Assess and plan for your specific care needs such as anesthesia and medical clearance for surgery
- Coordinate your discharge plan to outpatient services, home or a sub-acute facility
- Assist you in getting answers to insurance questions
- Act as your liaison throughout the course of treatment from pre-op through after discharge
- Answer questions and coordinate your hospital care with Spine Center members

You may call the Spine Program coordinator at any time pre-op to ask questions or raise concerns about your pending surgery at 423-431-6937. Please leave a message and your call will be returned as soon as possible if the program coordinator is not available.

Before Surgery

Obtain Laboratory Tests:
Pre-Admission Testing (PAT)

When you were scheduled for surgery, your physician’s office also scheduled you for pre-admission testing (PAT). Please see the first page of this book for the date and time. Follow the instructions given to you at your physician’s office and report to the Same Day Surgery Center at Johnson City Medical Center at the appropriate time. (See “Welcome to Johnson City Medical Center” on page X for location). When you report for pre-admission testing, you will be asked the following information in order to pre-register you for surgery.

- Home phone number
- Marital status
- Name, address and phone number of nearest relative
- Name, address and phone number of someone to notify in case of emergency (this can be the same as the nearest relative)
The Spine Center Team

- Name of insurance company, mailing address, policy and group numbers, and insurance card
- Name of insurance holder, his/her address, phone number, work address and work phone number
- Patient’s employer, address, phone number and occupation
- Patient’s full legal name and address, including county
- Social Security Number

*Bring your insurance card, driver’s license or photo ID with you to this appointment.

Billing for Services

After your procedure, you will receive separate bills from the anesthesiologist, the hospital, the radiology and pathology departments (if applicable), and the surgical assistant. If your insurance carrier has specific requirements regarding participation status, please contact your carrier.

Review “Patient Bill of Rights”

You have the right to make decisions about your medical care. You have to be informed of treatment and consent to be treated. You can refuse or have taken away any medical treatment, with very limited exceptions. If you have advance directives, please bring copies to the hospital on the day of surgery.

*See page 11 for additional information.
Basics of Anesthesia

What types of anesthesia are available?
Decisions regarding your anesthesia are tailored to your personal needs. Certain illnesses can potentially make one type of anesthetic better than another. For instance, a patient with emphysema would probably do better with a spinal. Meanwhile, a patient with a bleeding disorder or on anticoagulants cannot have a spinal due to the risk of bleeding in the spinal canal.

The types available for you are:
GENERAL ANESTHESIA renders the patient unconscious for the duration of surgery. The patient is typically sedated prior to surgery and put to sleep once in the operating room and awakened in the recovery room.

REGIONAL ANESTHESIA techniques include spinal blocks, epidural blocks, and arm and leg blocks. Patients undergoing spinal block are also usually sedated prior to surgery, and the spinal is placed in the operating room. This involves sitting the patient upright on the operating table, numbing the skin low in the middle of the back, and with a small-diameter needle injecting a dose of local anesthetic, which begins to work almost immediately. Patients are then sedated for the rest of the operation and allowed to stay in the recovery room until most of the spinal has worn off.

Will I have any side effects?
Your anesthesiologist will discuss the risks and benefits associated with the different anesthetic options, as well as any complications or side effects that can occur with each type of anesthetic. Nausea or vomiting may be related to anesthesia or the type of surgical procedure. Although less of a problem today because of improved anesthetic agents and techniques, these side effects continue to occur for some patients. Medications to treat nausea and vomiting will be given if needed. The amount of discomfort you experience will depend on several factors, especially the type of surgery. Your doctors and nurses can relieve pain with medications. Your discomfort should be tolerable, but do not expect to be totally pain-free. The staff will teach you the pain scale (1-10) to assess your pain level.

What will happen before my surgery?
You will meet your anesthesiologist immediately before your surgery. Your anesthesiologist will review all information needed to evaluate your general health. This will include your medical history, laboratory test results, allergies and current medications. With this information, together you will determine the type of anesthesia best suited for you. He or she will also answer any further questions you may have.
Start Pre-Operative Exercises

Many patients with arthritis favor their joints and thus become weaker. This interferes with their recovery. It is important that you begin an exercise program before surgery.

Arrival Time at Hospital

When you have your pre-admission testing done, you will be instructed on what time to arrive at the hospital the morning of your surgery. You will be asked to come to the hospital two hours before the scheduled surgery to give the nursing staff sufficient time to start IVs, prep and answer questions. It is important that you arrive on time to the hospital because sometimes the surgical time is moved up at the last minute and your surgery could start earlier. If you are late, it may create a significant problem with starting your surgery on time. In some cases, tardiness could result in moving your surgery to a much later time. Parking is available in the visitor lots for free.

The Night Before Surgery

Do Not Eat or Drink

Do not eat or drink anything after midnight, EVEN WATER, unless otherwise instructed to do so.

No chewing gum.

Special Instructions:
Follow specific instructions given to you at your physician’s office and at your pre-admission testing regarding medications.

What to Bring to the Hospital:

Personal hygiene items (toothbrush, powder, deodorant, battery-operated razor, etc.); watch or wind-up clock; hand-held mirror to use at bedside; shorts and tops; well-fitted slippers, flat shoes or tennis shoes. For safety reasons, DO NOT bring electrical items. You may bring battery-operated items.

You Must Bring the Following to the Hospital:

• Your Patient Guidebook
• A copy of your advance directives
• Your insurance card, driver’s license or photo ID, and any co-payment required by your insurance company

Other Things to Remember:

• Please leave jewelry, valuables and large amounts of money at home
• Makeup must be removed before your procedure
• Remove nail polish
Pre-Op Exercises

It is not completely up to your surgeon to heal your back. You must partner with your surgeon for optimal results. It is important to be as fit as possible before undergoing spine surgery. This will make your recovery much faster. You should begin the exercises shown here and continue until your surgery. Repeat each exercise 20 times. You should be able to do them in 15-20 minutes and it is recommended that you do all of them twice a day. It is not harmful for you to do more. Consider this a minimum amount of exercise prior to your surgery.

Also, remember that you need to strengthen your entire body, not just your back. It is very important that you strengthen your arms by doing chair push-ups, because you will be relying on your arms to help you get in and out of bed, in and out of a chair, walk, and to do your exercises post-operatively.

Stop doing any exercise that is too painful.

Neck Stretch

You may either sit or stand. Start with your chin parallel to the floor, then move your head back. Return to the starting position. (You will feel as if you have a double chin.)
Pre-Op Exercises

Pelvic Tilt

Lie flat on the floor. Bend your knees to about a 45-degree angle, keeping your feet flat on the floor. Tighten your abdominal and buttock muscles. Your hips should arc slightly toward the ceiling, so that you feel the small of your back flatten against the floor.

Partial Sit-Up

Lie flat on the floor. Bend your knees to about 45 degrees, keeping your feet flat on the floor. Fold your arms across your chest. Using your abdominal muscles, raise your upper body, keeping your back and neck aligned, and pause shortly. Slowly lower yourself back to your original position.
Pre-Op Exercises

Hamstring Stretch

Lie flat on the floor with a rolled towel under your neck. Bend your knees to about 45 degrees, keeping your feet flat on the floor. Clasp your hands around your right thigh, just above the knee. Tighten your abdominal muscles, and raise your leg with your hands. Pull your leg toward your chest until you feel a stretch. Slowly straighten your leg as much as you can. Reverse the procedure to lower your leg. Repeat with your left leg.
Pre-Op Exercises

Press-Up

Lie on your stomach with your legs together, and place your hands on the floor, near the sides of your head, elbows bent. Straighten your arms, pushing your upper body away from the floor, keeping your hips in contact with the floor. Slowly bend your elbows, allowing your upper body to relax down to the floor.
Pre-Op Exercises

Hip Stretch

From a standing position, lean forward on your right foot while tightening your abdominal muscles. Continue leaning forward, shifting your weight onto your right foot. You should feel a gentle stretch on your left hip. Repeat with your left leg.
Pre-Op Exercises

Slide

Stand with your back against a wall and place your feet 12 to 16 inches away from the wall, shoulder-width apart. Slightly tilt your hips so that your back is flat against the wall. Slide down the wall into a half-sit. Make sure your knees do not extend beyond your ankles. Return to the starting position.
Pre-Op Exercises

Armchair Push-Ups

Sit in a sturdy chair, with your back straight. Place your hands on the armrests. With your toes pointed, extend legs so that heels rest on the floor. Straighten your arms, raising your buttocks off the chair seat if possible. Return to starting position.

Home Preparation for Return from Hospital

Have your house ready for your arrival back home. Clean. Do the laundry and put it away. Put clean linens on the bed. Prepare meals and freeze them in single-serving containers. Cut the grass, tend to the garden and do other yard work. Pick up throw rugs and tack down loose carpeting. Remove electrical cords and other obstructions from walkways. Install nightlights in bathrooms, bedrooms and hallways. Arrange to have someone collect your mail and take care of pets or loved ones if necessary.
Day of Surgery

What to Do
Report to Johnson City Medical Center, where you will be prepared for surgery. Your surgeon will call your family when the surgery is complete. If you have a back brace, please bring it and let your family keep it until you get your post-operative room at The Spine Center.

What to Expect
You will be prepared for surgery by a perioperative team. This includes asking you many history questions, assessing your vital signs and reviewing your current home medications. You will leave the perioperative area and go to the holding area prior to your surgery. An operating room nurse as well as your anesthesiologist will interview you. They will escort you to the operating room where your surgeon will do your procedure.

Following surgery, you will be taken to a recovery area where you will remain for one to two hours. During this time, pain control will be established, your vital signs will be monitored and an X-ray may be taken of your surgical site. You will then be taken to The Spine Center (6400) where a nurse will care for you. We do allow you to have visitors on your operative day if you feel like company. If you would prefer not to have visitors, the spine care team can arrange this for you.

Most of the discomfort occurs the first 12 hours following surgery, so during this time, you will receive pain medication through your IV. You will probably remain in bed the first day. The staff will instruct you on your appropriate activity level. It is very important that you wear your SCDs (Sequential Compression Devices) and Tends on the first day. This will help prevent blood clots from forming in your legs. You should begin using your Incentive Spirometer and doing the deep-breathing exercises. The spine care team will also assist you with turning, coughing and deep breathing.
After Surgery

Post-Op Day 1
On Day 1 after surgery, you will be bathed, helped out of bed and seated in a recliner in your room. We prefer the straight-back recliners for you. Your surgeon or the physician assistant will visit you in the morning. The physical therapist will assess your progress and get you walking on this day. IV pain medication will be stopped and you will begin oral medication.

Occupational therapy will begin, if needed. Visitors are always welcome.

Post-Op Day 2 (if needed)
On Day 2 after surgery, you will be helped out of bed early and will dress in clothing you’ve brought to the hospital. Clothing should be loose. Shorts and tops are usually best; long pants are restrictive. Your day will start early in the morning with a walk with your physical therapist. After lunch, you may have a second physical therapy session. You may begin walking stairs on this day. Evenings are free for friends and family to visit.

Post-Op Day 3 (if needed)
Day 3 is similar to Day 2 in the morning, and you can practice stairs if needed.

You will be discharged in the afternoon.
Discharge Instructions

If You are Going Home
Since you will not be permitted to drive for some time after surgery, you will need to make arrangements for someone to drive you home. You will receive written discharge instructions concerning medications, physical therapy, activity, etc. We will arrange for equipment.

Take this Patient Guidebook with you. Most patients go directly home to continue therapy as an outpatient, though some patients may require home health services. If your surgeon determines this is necessary, we will arrange it. Please be aware that transportation issues do not usually qualify you for home health services.

If You are Going to a Sub-Acute Rehab Facility
The decision to go home or to a sub-acute rehab facility will be made collectively by you, the Spine Program coordinator, your surgeon, physical therapist and insurance company. Every attempt will be made to have this decision finalized in advance but it may be delayed until the day of discharge.

Please keep in mind that the majority of our patients do so well, they don’t meet the guidelines to qualify for sub-acute rehab. Also, keep in mind that insurance companies do not become involved in “social issues,” such as lack of caregiver, animals, etc. These are issues you will have to address before admission.
Post-Op Care
Caring for Yourself at Home

When you go home, there are many things you need to know for your safety, your speedy recovery and your comfort.

Control Your Discomfort

- Take your pain medicine at least 30 minutes before physical therapy.
- Gradually wean yourself from prescription medication to Tylenol®. You may take two extra-strength Tylenol in place of your prescription medication up to four times per day.
- Change your position every 45 minutes throughout the day.
- Use ice for pain control. Applying ice to your surgery site will decrease discomfort, but do not use for more than 20 minutes at a time each hour. You can use it before and after your exercise program. A bag of frozen peas wrapped in a kitchen towel makes an ideal ice pack. Mark the bag of peas and return them to the freezer (to be used as an ice pack later).

Body Changes

- Your appetite may be poor. Drink plenty of fluids to keep from getting dehydrated. Your desire for solid food will return.
- You may have difficulty sleeping. This is normal. Don’t sleep or nap too much during the day.
- Your energy level will be decreased for the first month.
- Pain medication that contains narcotics can cause constipation. Use stool softeners or laxatives such as milk of magnesia if necessary.

Stockings and/or Compression Stockings

You may be asked to wear special white stockings or compression stockings. These stockings are used to help compress the veins in your legs. This helps to keep swelling down and reduces the chance for blood clots.

- Wear the stockings at all times, removing for one to two hours twice a day.
- Notify your physician if you notice increased pain or swelling in either leg.
- Ask your surgeon when you can stop wearing the stockings. Usually, this will be around three weeks after surgery.
Recognizing and Preventing Potential Complications

Infection

Signs of Infection
• Increased swelling and/or redness at incision site
• Change in color, amount and odor of drainage
• Increased pain at surgery site
• Fever greater than 101.5°F for longer than 24 hours. You may take Tylenol to decrease your temperature.
• Call your physician’s office if any of the above signs occur.

Prevention of Infection
• Take proper care of your incision as directed.

Pulmonary Embolus

Pulmonary embolus occurs when a blood clot breaks away from the vein wall and then travels to the lungs. This is an emergency and you should call 9-1-1 if suspected!

Signs of Pulmonary Embolus
• Sudden chest pain
• Difficult and/or rapid breathing
• Shortness of breath
• Sweating
• Confusion

Prevention of Pulmonary Embolus
• Prevent blood clot in legs
• Recognize a blood clot in leg and call physician promptly

Blood Clots in Legs

Surgery may cause the blood to slow and coagulate in the veins of your legs, creating a blood clot. This is why you take blood thinners after surgery. If a clot occurs despite these measures, you may need to be admitted to the hospital to receive intravenous blood thinners. Prompt treatment usually prevents the more serious complication of pulmonary embolus.

Signs of Blood Clots in Legs
• Swelling in thigh, calf or ankle that does not go down with elevation
• Pain, tenderness in calf

Prevention of Blood Clots
• Walking
• Compression stockings and exercises such as ankle pumps and circles

Constipation

Symptoms of Constipation
• Having a very hard time pushing out your stool—it may be hard and dry
• Pain or bleeding during a bowel movement
• Having the feeling you need to have a bowel movement and cannot

Ways to Prevent Constipation
• Drink 6-8 (8 ounce) glasses of water every day
• Increase your fiber intake in your well-balanced diet
• Take a stool softener as directed by your physician
• Walk
Caring for Your Incisions

Lumbar Surgery
The incision is closed with either staples, sutures, skin glue or steri-strips.

Staples and Sutures need to be removed 7-10 days after surgery. You will be told by The Spine Center staff what day you need to call your physician's office or return to your physician's office for staple or suture removal. Your removal day is ________. If you have to call your physician's office, call at 9:30 a.m. on your staple or suture removal day and schedule a time to have your staples or sutures removed.

Steri-Strips will peel off slowly over 7-10 days following your surgery. You may get the incision wet 48 hours after surgery (use mild soap and water on the site). Use dry gauze to cover the staples after you shower if desired for comfort.

Glue
Monitor your incision site for any type of reaction and call your physician's office for anything abnormal.

*If a bone graft was taken from your hip, treat this incision as instructed above. Often the bone graft area is quite sore and may limit your activity. Review the “signs of infection” section and notify your physician if any of these symptoms occur.

Durable Medical Equipment (DME)
Special equipment may be needed when leaving the hospital and going home. Examples of DME:

- Cane
- Walker
- 3-in-1 Elevated Commode (provides an extra chair with arms, a raised toilet with arms and a shower chair)
- Reacher, Fetch-it or Grabber – a trigger-action picker-upper to pick up items off the floor; this device can also assist with putting on and taking off shoes and socks

In very rare cases, a wheelchair and/or a hospital bed may be provided. DMEs are usually rental equipment, but sometimes they can be purchased. This decision is sometimes based on insurance coverage.

Braces
Your surgeon may prescribe a brace for you to wear after surgery to protect your back or neck. It is usually worn at all times except when lying in bed. The brace is designed to keep you from moving in a way that may cause harm. Your physical therapist will teach you how to put the brace on by yourself. Usually the brace is applied before you get out of bed (lying down) and is removed after you lie back in bed. There are several types:

- Anterior cervical orthosis (ACO) neck brace
- Thoraco lumbosacral orthosis (TLSO)
- Lumbosacral orthosis (LSO)
Daily Living and Safety Tips
Self-Care

The best thing to do is “think before you act.” Ask yourself if the activity you are about to perform can be done so safely, without affecting your back. Taking a moment to assess the situation will also make you more aware of the alignment of your neck and back. Allow plenty of extra time for normal, daily activities. Do not hesitate to ask for assistance in performing any activity, even if it seems simple. Let your family, friends and co-workers be a part of your healing as well. Remember, they know of your procedure and want the best possible outcome for you.

Bathing

Make sure all surfaces are dry before you get into the tub or shower. Walk-in showers are recommended over baths because they are easier to get in and out of. Long-handled bath sponges and handheld shower hoses are helpful. If showering, hang a shower caddy over the shower nozzle to keep your bath articles within easy reach. Place a chair with arms that is made for being in water in the shower for safety’s sake. If at all possible, have someone supervise you during your first trials of getting in and out of the tub. Keep in mind, you can also take a bath in a kneeling position. You may be more comfortable if you place a rolled towel under your knees. Sitting on the bottom of the tub is not recommended due to the strain it places on your back when getting in and out. Placing a rubber bath mat in the tub will reduce your chances of slipping.

Sink/Counter Activities

Do not bend over the sink or counter. Open the cabinet directly under your working area. Elevate one foot by placing it on the bottom shelf of the cabinet. Place one hand on the counter to support your weight and bend at the hips, not at the back. You may also perform these activities in a kneeling position. Placing a bathroom rug under your knees will help you be more comfortable.

Toilet

During the first few weeks, you may need to use a raised toilet seat or a bedside commode, also known as a 3-in-1 commode. This commode has three uses:

- Toilet/commode
- Chair
- Shower chair

A regular toilet seat is often quite low. This could cause back pain, or you may not have enough strength in your legs to sit down and get up from it. Although awkward at first, you may want to try facing backwards when using the toilet. This not only prevents you from bending forward, but gives you some support when you stand back up.

Getting In and Out of Bed

Sit on the edge of the bed. Using the arm closest to your pillow for support, lower your upper body sideways while gently swinging your legs and feet onto the bed. This results in you lying on your side. To get out of bed, reverse this procedure. This technique is commonly referred to as the logroll method. Keeping your head and back aligned, place your hands on your thighs. Push against your thighs as you stand up. You may also use a nightstand for support.
Resting/Sleeping
Use a firm mattress or couch. Soft pillows can provide support for your neck and legs (under your knees) while lying on your back. Do not use pillows that cause your neck to misalign with your back. You will not have complete control over your sleeping positions while you sleep, but it is important to begin the process of sleeping in a position that keeps your neck and back properly aligned. This also promotes healing. Keep in mind that your muscles may have tightened during your sleep, so get out of bed slowly.

Dressing
Allow yourself plenty of extra time to dress. Hurrying or anxiety may cause you to use improper body posture. Loose-fitting clothes such as sweatpants or shorts with elastic waists and slip-on shoes are recommended. You may want to purchase a long-handled shoehorn. Avoid wearing high heels. Putting on your socks will probably be difficult. Your therapist might demonstrate a sock aid. Do not sit on a bed or chair when dressing.

Underwear, slacks and socks should be put on while lying flat on your back. Keep your back/neck flat and pull your clothing up as far as possible. Then, using the recommended technique to stand up, finish pulling up your clothing.

Sitting
Sitting puts more pressure on your spine than lying or standing. You may need to avoid sitting for the first few days after your surgery. If approved by your surgeon, you may begin to sit in 10- to 15-minute increments—about as long as it takes to eat a meal. When you do sit, use a chair with a straight backrest. Arm supports will make it easier for you to sit down and get up. You may place a small towel or pillow between your chair and your lower back to help maintain your normal lumbar curve. There are also back cushions that may be tied to a chair. Stand up and change positions if you begin to feel any discomfort in your back. A high seat at about knee level will help you get up with minimal pain. If the chair is too low, you can place a firm pillow on the seat. When you are working in a sitting position, make sure your feet are flat, your work is close to you and you do not slouch. You can also turn the chair around backwards and sit with legs straddled. This position promotes proper alignment. When getting up, it’s important to move to the edge of the furniture before you stand. Use armrests when possible to slowly push yourself into a standing position.

Standing
Maintain the three natural curves of your back when standing. If you are standing for more than a few minutes, place one foot on a stool or lower cabinet shelf whenever possible. Keep your head, shoulders and hips aligned. Standing with your feet shoulder width apart is recommended for balance if you cannot elevate one foot. Keep your working surface close to your waist height if possible. If you must work in a stooped (forward) position, you must interrupt your posture on a regular basis. Stand upright and slowly bend backward 3-5 times every 10-15 minutes.

Driving/Riding in a Car
Please do not drive until you receive your surgeon’s approval. Most car seats are very low and can cause unnecessary strain on your back while getting in and out. You may want to add a firm pillow on the seat to make it higher. You may also incline the backrest and push the car seat backwards in order to have more space to get in and out. When you get in, sit first, then slowly swing both your legs in at the same time.
Kitchen Activities
Whenever possible, have frequently used items placed on the countertop. This may include pans, bowls, storage containers and spices. You may not “like” the way the counter looks, but it will be back to normal in no time. The use of a grabber is highly recommended to reach items either above or below the counter. If you must reach something below the counter, lower yourself to one knee. Grab the item and place it on the counter. Using the counter or a chair as support, slowly stand up. If you must reach something above the counter, use a low stool whenever possible. Place one hand on the counter for balance, and reach with the grabber.

Since you must limit the weight you carry for the first six weeks, it is best that you do not carry groceries. Obtain assistance at the store and at home. After six weeks, you may carry light bags, close to your body. If you feel any strain whatsoever on your back, the bag is too heavy for you. When loading a dishwasher, place all items on the counter above the dishwasher. Drop down to one knee to load the items. Reverse this procedure to unload.

Use the counter for support when standing up. Again, now is the time family or roommates can be of help.

Laundry
If using a top-loading machine, stand on one leg with knee slightly bent. Raise your other leg slightly in back of you, being careful to maintain your balance. Avoid bending forward into the washer. Obviously, small loads are much easier on your back than large loads. Wet clothes weigh much more, so remove them from the washer slowly, one or two items at a time.

Lifting
Avoid lifting as much as possible, or ask for assistance. Do not lift objects that are awkward or weigh more than five pounds until your physician says it is OK. As an example, most people don’t know that a gallon of milk weighs more than seven pounds.

Your doctor may increase lifting limits by a pound or two per week. If you must lift something, bend your knees, keep the object close to you, and let your leg and arm muscles do the work—not your back. Move slowly and avoid sudden, jerky movements. Be sure to test the weight of the object before you completely lift it. Do not bend or twist. Pivot on your heels instead. Tightening your stomach muscles also relieves pressure from your back. When lifting an item from a lower position, use your legs and keep your back properly aligned. When lifting an object from a table, slide it to the edge of the table so that you can hold it close to your body. If lifting a child, bend down on one knee and place the child on your thigh. Bring the child close into your upper body. Keeping your back and neck aligned, slowly push off with your bent leg into a standing position, keeping one or both arms under the child’s buttocks. If possible, have the child stand on a chair or couch before picking him/her up. On bended knee, slide the child onto your thigh, keeping him or her close to your upper body. Do not carry a child on a hip for more than a few minutes at a time.
Avoiding Weight Gain after Surgery

Weight gain is not uncommon after back surgery. Between decreased activity levels, boredom associated with immobility, depression and back pain, those extra pounds can creep up on you before you know it. Unfortunately, excess weight only fuels the vicious cycle of increased pain, immobility and depression.

These suggestions may be helpful in preventing excessive eating and weight gain after back surgery.

• Drink at least two quarts of water each day. This will help you feel full and you will be less likely to overeat.

• Fill your refrigerator and cupboards with healthy foods. The Internet and the library are endless resources for healthy eating habits and low-fat recipes.

• Chew foods with a lot of “chewing power.” It actually takes 20 minutes for your stomach to “tell” your brain it is full. If you are chewing a long time, you will be satisfied with smaller portions. Healthy foods with “chewing power” include: popcorn (easy on the butter and salt), pretzels, apples, celery, carrots and bagels. For example, picture how many apples you can eat in 20 minutes. Now picture how much ice cream you can eat in 20 minutes! Chewing gum also works.

• Keep your mind and hands busy. Watching TV for extended periods of time is not only bad on your back, but the commercials often entice us to eat when we’re not hungry. Focus on crossword puzzles, building models, needlepoint/knitting, card games, board games or anything else that will divert your attention from TV and/or keep you away from the refrigerator. This is a great opportunity to spend some “quality” time with family and friends.

Spine Precautions

DO

• Change positions frequently to avoid stiffness.
• Logroll out of bed.
• Perform only the exercises prescribed to you by your doctor or physical therapist.
• Try to limit stair climbing. Go up a step with your strongest leg first and come down a step with your weakest leg first. Hold onto a handrail if available.
• Walk frequently; let pain be your guide.

DO NOT

• Bend
• Lift more than 5 lbs.
• Sit longer than 20-30 minutes at a time.
• Sit on low surfaces.
• Twist
Decreasing Your Risk of Falls

Check Home Environment

- Have good lighting. Put nightlight in bedroom, bathroom and hallway. Always have a flashlight handy at your bedside.
- Have rugs firmly fastened to floor or with nonskid backing. Remove throw rugs.
- Have electrical cords and telephone cords out of walking areas.
- Put bath mat in tub/shower.
- Put grab bars near bathtub/shower and toilet areas to assist with transfers.
- Wear low-heeled shoes/socks with good traction. Avoid wearing slippers, which can cause you to trip.
- Keep items within easy reach so you can avoid the need for stepladders and stools.
- Be careful around bed corners to avoid catching assistive devices (canes, walkers, etc.) on sheets and tripping.
- Keep pathways clear of obstacles.
- Keep the temperature in your home at a comfortable level, because too hot or too cold can make you dizzy.

Maintain Your Health

- Get your vision tested regularly.
- Take good care of your feet. If you have problems with your sensation, pain, corns or abnormal nail growth, have a physician examine your feet.
- Consult your physician about any side effects from medications.
- Use your assistive device (cane, walker, etc.) if suggested by your physician/physical therapist.
- When rising from bed, sit on the edge of the bed for a few minutes before standing up in order to allow your blood pressure time to adjust.
Exercises

Logrolling

1. Lying on your back, slowly bend your knees up one at a time.
2. Move your body as one unit to roll onto your side. Keep your knees bent and together as you roll.
3. Push up with your lower elbow and push down on your upper hand as you slowly lower your legs to the floor, moving as one unit.

To Get Back Into Bed

1. Reverse the procedure, making sure your body is moving as one unit and your knees are bent until you are flat on your back.
2. Slowly lower your legs one at a time.
Sexual Activities
Your physician will tell you when you may resume sexual activities. You and your partner can continue a sensual, loving, healthy sex life after your surgery. You will need to use certain positions to keep the spine aligned properly. There are also certain positions to avoid. The pamphlet “Easing Back Pain During Sex – Finding Comfortable Positions” is an outstanding reference guide that discusses the dos and don’ts of sex, and demonstrates comfortable and recommended positions using clothed figures. You can get this pamphlet at your physician’s office.

Depression and Motivational Healing
It is normal to feel discouraged and tired for weeks after your surgery. These feelings may be your body’s natural reaction to the cutback of the extra hormones it provided you with to handle the stress of surgery. Although emotional letdown is not uncommon, it must not be allowed to get in the way of the positive attitude essential to your recovery. If you were particularly energetic, on the go and/or kept your body in good shape before your surgery, having to “take it easy” may be a blow to your active, independent lifestyle. You may resent the fact that you didn’t “plan” on this happening to you. Feeling this way is entirely normal.

You are going through a type of loss—a loss of controlling the lifestyle that you have been leading up until this time. In a sense, you are grieving—grieving for a “you” that you do not have right now. You may experience emotions you are not used to feeling—sadness, frustration, anger and resentment, to name a few. Some patients lose the definition of “who they are.” Grief can show up in numerous ways: loss of appetite, withdrawing from friends and family and insomnia, to name a few. This “grief” is normal, but you must be careful not to get so caught up in it that it dictates your life. You must focus on positive results. Granted, you may not be the same person you were before, but you have to redirect your energies into things you “choose,” as opposed to things you “did.” Use this down time to reflect on what you want in the future, and not dwell upon the past. If you didn’t like your lifestyle before your surgery, you can choose a different lifestyle for your future.
Lumbar Spine
Anatomy of the Spine

In order to better understand the most common injuries and diseases of the spine, it is essential to have a fundamental understanding of spine anatomy and its role in the body. The human spine is a remarkable structure and it performs a number of important functions:

- It provides protection for the spinal cord.
- It provides the support needed to walk upright.
- It allows the torso to bend and twist.
- It supports the head and allows movement from side to side and up and down.

The spine is made up of a column of 26 bones that extend in a line from the base of the skull to the pelvis. Twenty-four of these bones are called vertebra (plural – vertebrae). When viewed from the side, the spine has a natural “S” curve.

Regions of the Spine – The spine can be divided up into three areas or regions.

The neck, or cervical region, is made up of the first seven vertebrae – C1 through C7.

The next area, the thoracic region, is composed of the next 12 vertebrae – T1 through T12.

The lumbar region, commonly called the “small” of the back, includes five vertebrae – L1 through L5.

Below the lumbar region is the sacrum, which is composed of five “fused” vertebrae.

The tailbone, or coccyx, is the final bone in the spinal column, and it is composed of three to five vertebrae fused together.
Cross Section of a Vertebra

The spinal cord travels from the brain through the entire length of the spine. Nerves branch out from the spinal cord all along its course. The nerves that exit C1 through C7 take care of everything that is going on in the face, eyes, ears, shoulders, hands and fingers. The nerves exiting the thoracic vertebrae (T1 to T12) look after the GI tract, the liver, ureters, some of the colon and the blood vessels in the abdomen. Those nerves leaving the spinal cord at L1 through L5 take care of the colon and the rectum, as well as the blood vessels in the legs, feet and toes.

Structures of the Spine

In addition to the vertebrae, there are a number of structures and features of the spine that are important to understand:

**Intervertebral Discs (Discs)** – pads of cartilage between vertebrae that act as shock absorbers.

**Facet Joints** – joints located on both sides and the top and bottom of each vertebra. They connect the vertebrae through which the nerves leave the spine and extend to other parts of the body.
Disc

**Interventional Foramen** – an opening between vertebrae through which the nerves leave the spine and extend to other parts of the body.

**Ligaments** – elastic bands of tissue that support the spine by preventing the vertebrae from slipping out of line as the spine moves. A large ligament often involved in spinal stenosis is the ligamentum flavum, which runs as a continuous band from lamina to lamina in the spine.

**Lamina** – part of the vertebra at the upper portion of the vertebral arch that forms the roof of the canal through which the spinal cord and nerve roots pass.
Problems of the Lumbar Spine

Before discussing how the disc can cause back pain, it is useful to first understand the role of a healthy disc in the spine and the anatomy. The disc between each vertebra has several important functions, including functioning as a spacer, a shock absorber and a motion unit.

Spacer
The height of the disc maintains the separation distance between the adjacent bony vertebral bodies. This allows motion between the vertebrae to occur, with the cumulative effect of each spinal segment yielding the total range of motion of the spine in any of several directions. Proper spacing is also important because it allows the intervertebral foramen (the opening the nerve must pass through) to maintain its size, which allows the individual nerve roots room to exit without being compressed or “pinched.”

Shock Absorber
Shock absorption allows the spine to compress and rebound when the spine is stressed during such activities as jumping and running. Importantly, it also resists the downward pull of gravity on the head and trunk during prolonged sitting and standing.

Motion Unit
The elasticity of the disc allows “motion coupling” so the spinal segment may flex, rotate and bend to the side all at the same time during a particular activity. This would be impossible if each spinal segment were locked into a single axis of motion.

The jelly-like central portion of the disc is called the Nucleus Pulposus. It is composed of 80 to 90 percent water. The solid portion of the nucleus is a very special type of connective tissue.

The outer ligamentous ring around the Nucleus Pulposus is called the Annulus Fibrosus, which completely seals the nucleus, and allows pressure inside the disc to rise as the disc is loaded. The annulus has overlapping radial bands, not unlike the plies of a radial tire, and this allows forces to be handled by the annulus without rupture under normal stress.

The disc functions as a hydraulic cylinder. The annulus interacts with the nucleus. As the nucleus is pressurized, the annular fibers serve a containment function to prevent the nucleus from bulging or “herniating.” The gelatinous nuclear material directs the forces outward, and the hoops of annular fibers help distribute that force without injury.
Pain Caused by the Disc

As people age, the inner nucleus can dry out (dehydrate), causing the disc space to narrow and the annular ligaments to bulge. With progressive nuclear dehydration, the annular fibers can crack and tear. This narrowing of the disc space may also allow the spinal segment to “sublux” (shift or slide), leading to osteophyte formation (bone spurs), foraminal narrowing, instability and pain.

Thoracic disc disease can cause pain and other symptoms in two ways:

1. Herniated Disc

If the annular fibers stretch or rupture, allowing the pressurized nuclear material to bulge or herniate and compress nerves, arm and shoulder pain and weakness may result. This is the condition called a pinched nerve, slipped disc or herniated disc. This condition will typically cause radiating arm pain as a result of the irritation against the nerve root.

The overwhelming majority of patients with a herniated cervical disc heal without surgery. If surgery is indicated, it involves removal of the portion of herniated disc material, such as a discectomy or microdiscectomy.

2. Degenerative Disc Disease

Improper movement over time as well as trauma from an accident can also cause disc degeneration and pain. For example, the disc may be damaged as the result of some trauma that overloads the disc, and portions of the annular fibers may tear. These torn fibers can then cause an inflammatory response when they are subjected to increased stress, and may cause pain, directly or indirectly, by muscle spasms as the neck muscles try to compensate.

When there is compression of the spinal cord, caused by arthritis, bone spurs or narrowing of the spinal canal, a condition called cervical spondylotic myelopathy (CSM) can occur.
Other Conditions

Spondylolisthesis is the condition when vertebrae are displaced either forward or backward on the vertebra below it.

Scoliosis is the lateral curvature either right or left of the spine that can involve one or more levels and can include both directions called an “S” Curve.

Kyphosis is the abnormal bowing of the back usually the upper back.

Radiculopathy, sometimes called radiculitis refers to any disease of the nerve root and usually involves inflammation.

Compression fracture is usually an osteoporotic condition and may or may not involve trauma.

Diagnostic Testing

Lumbar Discography
Lumbar discography is an injection technique used to evaluate patients with back pain who have not responded to extensive conservative care regimens such as medications, rest and physical therapy. The most common use of discography is for surgical planning prior to a lumbar fusion or for a less invasive procedure such as nucleoplasty or intradiscal electrothermal annuloplasty (IDET).

Indications for a Discogram
The indications for ordering a discogram prior to a lumbar fusion or for a less invasive procedure varies greatly from surgeon to surgeon.

Lumbar discography is considered for patients who, despite extensive conservative treatment, have disabling low back pain, groin pain, hip pain, and/ or leg pain. When a variety of spinal diagnostic procedures have failed to determine or pinpoint the primary cause of pain, you may benefit from lumbar discography especially if spinal surgery is contemplated.

Unique Aspects of Discography
It is important to understand that the discogram is less about the anatomy of the disc (what the disc looks like) and more about its physiology (determining if the disc is painful). It is well known to discographers that a really abnormal looking disc may not be painful and a minimally disrupted disc may be associated with severe pain. It is impossible to definitively diagnose a painful disc without performing a discogram.
A lumbar MRI and CT myelogram are very sensitive diagnostic tests but are not very specific in pinpointing actual causes of pain (pain generators). The lumbar discogram, if performed properly, is designed to induce pain in a sensitive disc. A spinal fusion procedure that is designed to relieve an internally disrupted, painful disc (pain generator) would not be the procedure of choice if pressurization of the disc didn’t reproduce the patient’s clinical discomfort. The surgeon needs to be absolutely sure that the level or levels being fused are responsible for the patient’s pain.

**Lumbar Myelogram**

A lumbar myelogram is a test where the radiologist places X-ray contrast (X-ray dye) into the fluid-filled sac that surrounds the lower lumbar nerve roots.

If you are having this test, you will be placed on your stomach on the X-ray table with a rolled-up blanket or pillow under your mid-section to produce a gentle curve in your back. This also helps to spread the backbones apart. Your skin is then cleansed and anesthetized. A very thin needle is placed between the backbones until the tip of the needle is in the fluid-filled space that surrounds the spinal nerves. Approximately 10 to 12 ccs of X-ray contrast is injected through the needle. X-ray films are then obtained on the X-ray table.

Following the myelogram, you will be taken to the CT scan room for additional pictures.

The entire procedure takes approximately one hour, with approximately one-half hour in each room. After the CT myelogram, you will be brought back to your chair. An additional hour of recovery in this department is usual to allow for rest, initiation of fluids and explanation of your discharge instructions.

When you go home, you are to stay on complete bed rest for a full 24 hours after the myelogram. You are encouraged to drink plenty of fluids. By following these instructions, you will help to prevent the most common adverse effect of a mylogram, which is the possibility of a headache.

A post-myelogram headache can occur when the small puncture hole in the fluid-filled sac does not heal, and allows for the leakage of spinal fluid out of the hole. Bed rest will help the small puncture hole to close, and the excess fluids will allow your body to keep up with the loss of the small amount of spinal fluid that may leak out of the hole.

*Should you have any fever following this procedure, you are advised to call your physician immediately!*
Post-CT Myelogram Instruction Sheet

- Bed rest for 24 hours after the test, with head down in a comfortable position. The head of the bed should be 15-30 degrees elevated. When you lay completely flat, the dye goes back into your head and causes a headache.

- Resume your normal diet. Please drink plenty of fluids.

- No alcoholic beverages for 48 hours

- No phenothiazine-type medications for 48 hours, including Compazine, Phenergan, Thorazine, Marazine and Norgine. Please check with the radiologist or your physician if you have any questions regarding your medications.

- Please notify your physician if you have a persistent headache, nausea, vomiting or fever.

- No bending from the waist, which lowers your head and causes headaches.

- It is OK to get out of bed to go to the bathroom and eat, but lay back in the bed as soon as possible.

- Headaches are typically relieved by laying back down.

We recommend that you do not take any medication that contains narcotics, as it could intensify a spinal headache.
Conservative Treatment Options

Conservative treatment options for your cervical, thoracic and/or lumbar spine may include one or all of the following:

• Acupuncture
• Aquatic therapy
• Body braces for the spine
• Body mechanics
• Education
• Injections/nerve blocks
• Medications
• Muscle stimulators
• Pain management
• Physical therapy
• Psychological/emotional biofeedback
• TENS unit
• Traction

When conservative treatments fail to help your spinal condition, a surgical consultation is recommended to determine what surgical options are available.
Understanding Lumbar Laminectomy

Laminectomy is the procedure of removing the lamina or bony roof of the spinal canal to help increase the size of the spinal canal to give more room for the spinal cord and/or nerve roots (decompression). A discectomy can be performed if needed. This is to remove the part of the disc that may be pressing on the nerve and/or spinal cord.

The operation is done while the patient is lying on his or her abdomen, or on the side. A small incision is made in the lower back. The surgeon then uses instruments to pull aside the fat and muscle, revealing the lamina portion of the vertebrae. The portion of the lamina is removed to expose the compressed nerve root. The source of the pressure varies, and can be relieved by removing part of a herniated disc, a disc fragment or a rough bony growth, often called a bone spur. Once the cause of this pressure is removed, the nerve or nerves can begin to heal. It is normal to have discomfort after the surgery, especially in the lower back.

It is important to note that this DOES NOT mean the operation was unsuccessful or that your recovery will be delayed. It is also not uncommon to experience leg aching, as it takes time for the previously compressed nerve to heal and for localized swelling to fade. Muscle spasms in the back and even down the legs can also occur, and medications will be given to help control pain and relieve spasms.

It is very important to remember that maintaining a positive attitude in the early post-operative period is crucial for a successful recovery.
Lumbar Laminectomy Frequently Asked Questions

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<th>How long of a hospital stay can I expect?</th>
<th>Will I require the use of a walking aid?</th>
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<td>For some patients, this is an outpatient surgery. For most, one to two days is the usual length of stay for an uncomplicated procedure.</td>
<td>This will depend on you and how well your strength and balance are prior to being discharged from the hospital.</td>
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<tr>
<th>Do I need a back brace?</th>
<th>Will I need physical therapy after surgery?</th>
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<tr>
<td>Yes, usually a corset type, mainly to remind you not to bend.</td>
<td>Yes, this will begin in the hospital and will continue for approximately four weeks after discharge. Then there will be instruction on a Lifelong Home Exercise Program.</td>
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<tr>
<th>What is the approximate time it will take for me to recuperate?</th>
<th>How long will my sutures stay in place?</th>
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<tbody>
<tr>
<td>Recuperation time is approximately two months; four weeks at home and then four to six weeks of light duty.</td>
<td>Most sutures are underneath the skin and will dissolve on their own. If your sutures are visible, they are usually removed in 10 to 14 days. Sometimes skin staples are used and are usually removed 10 to 14 days after surgery.</td>
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<th>How long before I can return to work?</th>
<th>Will I be able to have sexual relations after surgery?</th>
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<td>This varies from person to person, and of course will depend on the extent of your surgery and the type of work that you were doing prior to surgery. Your surgeon will discuss with you a plan to safely return to work.</td>
<td>Yes; however, we request that you wait approximately two to four weeks after surgery and use a dependent position at first. A manual is available upon request. See page XX for more information.</td>
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<th>How long before I can drive?</th>
<th>How long before I can fly in a plane?</th>
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<td>Approximately one week, but that depends on the length of time you are taking narcotic pain medication.</td>
<td>You will not be able to fly for at least two weeks after your surgery. Your surgeon will give you more specific information for your particular situation.</td>
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<th>How should I take care of my surgical incision?</th>
<th>How long before I can take a bath at home?</th>
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<td>These instructions will be given to you in the hospital and demonstrated by your nurse. It will be important to keep the wound clean and to be sure to call your surgeon if you have any fever, drainage from the wound, or any neurological changes such as weakness, decreased sensation, or difficulty controlling your bowels or bladder. In some cases, the home health nurse will check your wound, or a family member will be instructed in the proper care.</td>
<td>Your physician discourages tub baths. He or she recommends HOT showers several times a day. The HOT showers will help with muscle spasms.</td>
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<th>When can I walk?</th>
<th>Do I need to be on a stool softener?</th>
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<td>We will have you up and walking after the surgery or by the first post-operative day.</td>
<td>Not as a rule, but it may be a good idea as sometimes constipation develops while in the hospital or if you have problems with constipation prior to surgery. Another factor to consider is that narcotic pain medications can promote constipation.</td>
</tr>
</tbody>
</table>
FAQ continued

**Is it OK to sleep on a waterbed?**
Yes, just be sure to follow any movement precautions, which are given to you at the time of discharge from the hospital.

**Will I be able to walk upstairs?**
Yes.

**Will I be able to go swimming?**
Swimming is a great activity for exercise. You will need to wait approximately 21 days after surgery as by this time, your sutures or staples will be removed and the wound has had time to fully close.

**When will my pain improve?**
Most patients get marked relief of the leg pain early post-operatively. Sometimes, during the first two months, you may have episodes of leg pain secondary to inflammation around the nerve. This will pass in time as the tissues heal.
Different types of spinal fusion include:

- **Anterior lumbar interbody spinal fusion (ALIF)** involves an anterior (abdominal) approach to access the lumbar spine. This means the surgeon makes an incision in the abdomen to access the spine from the front.

- **Posterior lumbar interbody spinal fusion (PLIF)** involves a posterior approach (from behind) to access the lumbar spine and usually includes a laminectomy procedure. This means the surgeon makes the incision in the back to reach the affected vertebrae.

- **Transforaminal lumbar interbody fusion (TLIF)** involves a lateral approach (from the side) to access the lumbar spine.

- A combination of the above is sometimes utilized for better stabilization and subsequent fusion of two or more vertebra.

When two or more vertebrae are unstable, your surgeon may fuse (join together) adjacent vertebrae, using metal cages and bone graft, or bone graft alone.
Anterior Lumbar Fusion/Disc Replacement
Frequently Asked Questions

Why does my back hurt?
Your back pain could be caused by one or more damaged discs and/or arthritis. This may result in misalignment or instability of the vertebrae in your spine.

How can it be fixed?
Non-surgical measures can frequently control the pain. Only you can decide if the level of pain you are experiencing is acceptable or not. If you are experiencing pain at an unacceptable level, or if you can’t function because of this pain, then surgery is indicated. The fusion procedure involves the removal of the disc(s) from between the affected vertebrae. Bone graft is then packed into the empty space. To keep your spine steady and promote fusion, extra support may sometimes be needed. A metallic cage may be placed in the now empty disk space or instrumentation (metal screws and plates or rods) may be needed.

Where does the bone come from?
If bone from the patient’s own body is used, the bone is usually taken from the pelvis. The bone may be taken through the incision made for the fusion, or through a separate incision. The area from which the bone is taken may be quite painful until it heals. Bone from bone banks may also be utilized. The bone is treated before it is used as a graft and the risk of getting a disease from bone graft is very low.

Could complications arise because of the surgery?
As with any procedure, there are general risks of surgery and anesthesia although they are very low. These include uncontrollable bleeding, wound infection, blood clots, pulmonary embolism, abdominal problems, loss of bowel or bladder control, impotence, retrograde ejaculation, heart attack, paralysis and death. Nerve root damage can also occur, which results in numbness and/or weakness in the leg. The possibility of these complications is very low.

Will I be hospitalized?
Yes. The usual stay is 1-3 days. Several factors can affect the length of time you are hospitalized such as the type of surgery performed, your health and your age. If there are complications, you may be in the hospital longer.

How long will I be in bed?
You will normally be up and walking the day after your surgery. In fact, walking is the best exercise for this type of surgery, and you are encouraged to walk daily.

Will I need a cane to walk?
Occasionally patients require the use of a walking aid. This depends on your strength and balance while hospitalized.

Will I need a blood transfusion?
Not typically. However, you may be asked to donate some of your own blood before your surgery in case you end up needing it.

How long will my sutures or staples stay in?
Many patients have dissolvable sutures. If staples are used, they typically stay in for 7-10 days.

How do I care for my incision?
Your nurse will show you. You will also be given written instructions to take home. It is very important to keep the wound clean. You need to contact your doctor for the following:
- Any drainage from the wound
- Fever
- Weakness or difficulty controlling your bowels or bladder
FAQ continued

**What will my limitations be after my surgery?**
Limitations will vary. You will be given written instructions to take home with you. Generally, you should avoid lifting heavy objects (35 lbs. for women and 50 lbs. for men). Avoid twisting and repetitive bending. Your therapist will review proper lifting techniques with you.

**Will I require physical therapy?**
Yes. Your therapy will start in the hospital and generally continue for 4-8 weeks, depending on your procedure and your healing rate.

**Will I be able to drive?**
No driving for approximately two weeks. You will need to make arrangements for someone to drive you home from the hospital.

**How long will it take me to recuperate?**
You can usually resume your normal activities in 2-3 months. Times vary based on the procedure performed.

**How long will I be out of work?**
Your surgeon will discuss this with you as there are various factors to consider.

**Should I exercise?**
Yes, your doctor will review which types are best for you.

**Will I be able to have sexual relations?**
Yes, however it is suggested that you wait approximately 2-4 weeks, and then only engage in special positions. Your progress will dictate the specific time period. See page 39 for more information.

**When can I take a bath or go swimming?**
You may get your incision wet approximately three weeks after your surgery, once the staples have been removed or the sutures dissolved.

**Is it OK to sleep on a waterbed?**
Yes. Be sure to follow instructions given to you at the hospital.