

VANDERBILT  UNIVERSITY
MEDICAL CENTER

Lumbar Decompression Surgery Guide

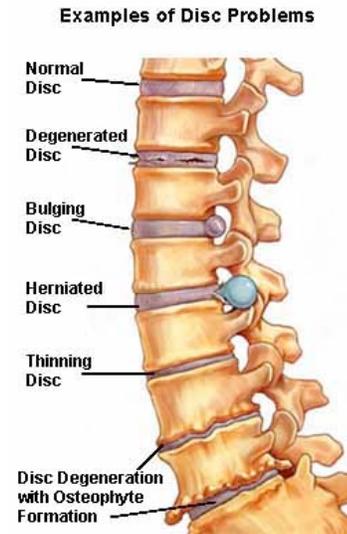
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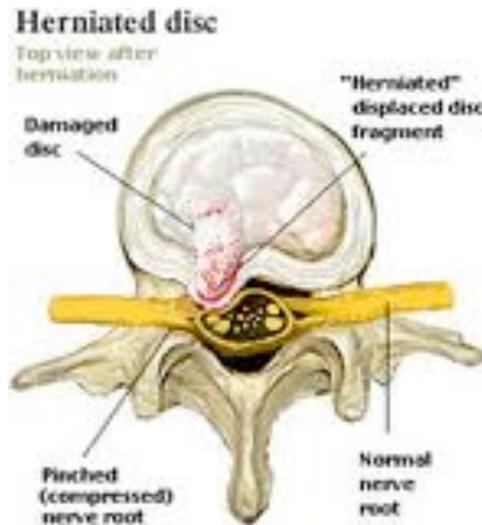
THE LUMBAR SPINE

You are being scheduled for surgery on your lumbar spine. The surgeon has determined the type of procedure that is necessary for you after reviewing your symptoms, your physical assessment, your x-rays and the other studies that you have had completed.

The bones in the lumbar spine are called vertebrae. There are 5 vertebrae in the lumbar spine. Each vertebrae in the lumbar spine are cushioned by an elastic type shock absorber known as the disc. The discs have a soft center, known as the nucleus, which is surrounded by a tough outer ring, known as the annulus. The discs allow the motion between the vertebrae. The discs, bony structures, ligaments and strong muscles all work together to stabilize the spine. The spinal cord, which is the nerve center of the body, connects the brain to the rest of the body, and usually ends at approximately L1 or L2. Beyond that, nerve roots are present in a fluid-filled tube. The outer layer of this tube is called the dura. At each segment, nerve roots exit/enter the spinal canal on each side (left and right).



Compression or squeezing on the nerves in the spinal cord or nerve roots may be causing many of the different types of symptoms that you may be experiencing. These symptoms may include back pain, leg pain, weakness in the legs, numbness in the legs. Other more serious symptoms include problems with bowel or bladder function.



The compression of the nerves can be caused by some of the following conditions:

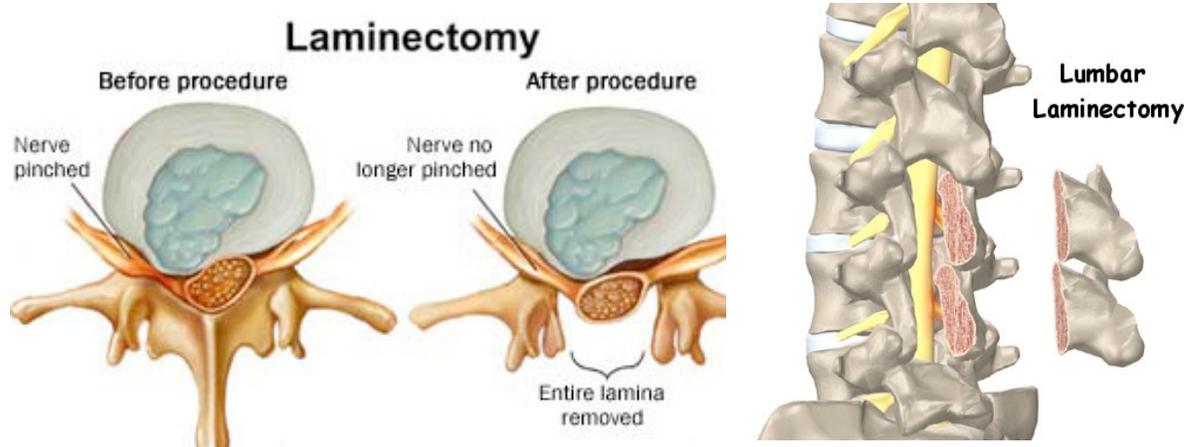
1. **Degenerative Disc Disease:** Degenerative disc disease is a process referring to the disc aging and loosing its ability to work as a cushion. During the aging process, or degeneration, the disc loses its elasticity, which can cause the disc to crack, flatten or eventually turn into bone. As the disc flattens, the bone (vertebrae) rub together which can then cause **bone spurs**. These bone spurs can cause pressure on the nerves.
2. **Herniated disc:** The disc is the cushion between the vertebrae. The inside of the disc, known as the nucleus, is made up of mostly water. A disc herniation refers to the outer part of the disc, known as the annulus, tearing, thus allowing the soft watery material on the inside of the disc to come out of the disc. The disc herniation can then cause pressure on the spinal nerves and/or the spinal cord.
3. **Bulging disc:** A disc bulging refers to soft inner part of the disc remaining in the annulus, but that it is no longer in its proper place. The bulging disc can cause pressure on the nerves and/or the spinal cord.
4. **Spinal Stenosis:** Spinal Stenosis is where bone spurs narrow in the space through which the nerve roots exist in the spinal canal.
5. **Spondylosis:** Spondylosis is the degenerative arthritis of the spine. The arthritis can cause pressure on the nerve roots.
6. **Radiculopathy:** A disease process referring to the pressure on the nerve root.
7. **Myelopathy:** A disease process referring to pressure or compression on the spinal cord.

LUMBAR SURGERY

The lumbar surgery that has been scheduled for you is to correct the problems that you have been experiencing in your lumbar spine. The surgeon has discussed with you the possible surgeries that may assist in helping correct your problems. He has elected to perform the one of the following surgeries for you:

Lumbar Laminectomy:

This involves removing all of the bone over the spinal canal to remove any compression.



Lumbar Foraminotomy:

This involves removing the bone over the nerve root that is being compressed. This can be done at the same time as a laminectomy, or as a separate procedure.

Incision: The incision is made vertically along the midline of your back, directly over the level needing work. The incision length will vary depending on how many levels are being fixed.

Blood Loss: It is an unusual occurrence for you to need blood during any of the procedures that have been discussed. There is a consent that you will need to sign that allows you to receive blood in a life-threatening emergency. Otherwise, blood loss is usually about 50-250ml.

Expected Pain: You will have some pain from surgery. We inject local anesthetic to minimize this, but you will have some soreness at the incision site. Fortunately, this pain eventually subsides. You may notice an immediate improvement in your leg pain, while back pain may improve over time.

Risks and Complications: The list below includes some of the common possible side effects for this surgery. Fortunately, complications are rare in our practice. Please note that the list below includes some, not all of the possible side effects:

- Side effects from anesthesia
- Infection
- Spinal cord or nerve damage
- Bleeding or possible need for transfusion
- A blood clot can form in your arms or legs
- Tear in the dura, resulting in spinal fluid (CSF) leak
- Re-herniation of disk material
- Spine instability

BEFORE SURGERY:

Before your surgery it may be necessary to have a urinalysis and blood work done, an EKG, and a chest x-ray. If needed, all of these tests will be scheduled for you and will be done during pre-testing when you meet with the anesthesia staff. If it has been some time since you have seen your primary physician and you have a lot of medical problems, it would be best that you see your medical doctor before your pre-test date.

Preparing for Surgery: During the six weeks of your recovery you should not be lifting more than **15 pounds**, unless instructed by your surgeon. Please make arrangements before surgery to have any heavy items purchased before surgery such as dog food, etc.

Length of Stay in the Hospital: Once your drains are out, your medical condition is stable, and your pain is under control with pills - the safest place for you to be is outside of the hospital environment. The hospital is the safest place to be if you are sick, but the less sick you are, the more dangerous it is to be in a hospital. This is because there are “super bugs” in the hospital that do not exist in the community. An infection with one of these “super bugs” can be life threatening. In additions, bedrest is not good for you. The sooner you get up, mobilize, walk and resume normal activities the lower the chance of developing a blood clot in your legs.

We will recommend your discharge as soon as we feel that your safety is better served at home than in the hospital. Generally, patients are able to go home either the day or surgery, or the following day.

Day Before Surgery: Light meals are recommended the day prior to surgery. *Nothing to eat or drink after midnight the night before your surgery.* You can brush your teeth, just do not swallow any water.

PRE-OPERATIVE MEDICATIONS

Some medicines can make you bleed longer so need to be stopped preoperatively.

- ASPIRIN products and BLOOD THINNERS (Coumadin, Persantine) need to be stopped 1 WEEK prior to surgery. Talk to the ordering physician for instructions on stopping.
- Stop all NON-STEROIDAL ANTI-INFLAMMATORY medications/arthritis medicines (such as Advil, Aleve, Ibuprofen, Motrin, Clinoril, Indocin, Daypro, Naprosyn, Celebrex, Vioxx, etc.) 1 WEEK before surgery. Tylenol products are suggested.
- Stop the following herbs at least 1 WEEK before surgery:
 - Chondroitin
 - Danshen
 - Feverfew
 - Fish Oil
 - Garlic tablets
 - Ginger tablets
 - Ginko
 - Ginsen
 - Quilinggao
 - Vitamin E
 - Co Q10

Medications for blood pressure, heart and breathing may need to be taken with a small sip of water the morning of surgery. During your pre-operative anesthesia appointment, the anesthesia staff will let you know what medications, if any, you should take.

After surgery, you can resume your home medications.

ON THE DAY OF SURGERY

On the day of the operation you will be asked to arrive approximately 2 hours prior to your operation. You will check in and then be taken to a Waiting Area. Approximately one hour before the operation you will be called to the Holding Area where you will meet the anesthesiologist. The anesthesia staff will then place catheters in your arms for the intravenous fluids and then will begin to medicate you. The scheduled time of your surgery is really just an approximation. Much depends on when the last case finished. Sometimes we can be off by more than a few hours.

When you finally get to the Operating Room, you generally will not see the surgeon, as he is often in a different room finishing up the surgery before your case. The staff working with the surgeon will assist the anesthesiologists and you will be put under general anesthesia. It is usually 30-60 minutes from the time that you enter the room until the surgeon makes the incision.

At the conclusion of the procedure, it usually takes 30-60 minutes to wake you up and put you on the hospital bed before you are taken to the Recovery Room. At the conclusion of the case, the surgeon will speak to the Family Waiting Area. Your family will be notified that your surgery is finished.

THE EVENING OF SURGERY:

The surgery team usually makes evening rounds sometime between 5:00pm and 9:00pm in the evening, depending on when he finishes his last surgery case. If you are not yet up in your room at the time that he is making rounds, he will come and see you in the Recovery Room.

1. **Activity:** You may get out of bed with the nurse's help as soon as you feel ready.
2. **Diet:** You will start on a clear liquid diet that will increase to a regular diet as you tolerate it.
3. **Pain Control:** When you are discharged from the Recovery Room and then discharged to your home, you will be given prescriptions for pain pills that you may have filled on your way home from the hospital. If you stay over night in the hospital, you will have an I.V.-intravenous fluids running into a catheter in your arm. You may have a button to push that is connected to a machine that gives you the pain medicine when you feel that you need it. You may be switched to pain pills the evening of your surgery or the next morning, depending on how your pain is controlled. Multiple medications will be utilized to assist with your pain. Some of the pain medicines will be given at set times without you having to ask and some pain medication requires that you ask for it if you are in pain. If you have a lot of muscle spasms, you can take a muscle relaxant such as Valium or Flexeril, which will be available.
4. **Medications:** After the operation you will have all kinds of medications that are available for you, including pain medications, anti-nausea medications, anti-itch medications, sleeping pills, and muscle relaxants. However, it is up to you to ask for these medications. In addition, if there is something that you require that we have not written for, please ask one of the floor nurses. There is always a doctor on duty 24 hours a day that can assist your nurse with the medications. If there is anything we can do to make your hospital stay more comfortable, please do not hesitate to ask.
5. **Drain:** You may have a drain coming from the incision. The drain removes the extra fluid from the layers of tissue under your skin. This helps to reduce the swelling.
6. **Sleep:** Don't expect to sleep too much the evening and night of your operation. The surgery allows you to have a several hour nap during the day, which may disturb your wake/sleep cycle. If you are able to get 2-3 hours of sleep the night of the operation, consider yourself lucky.

THE MORNING AFTER SURGERY:

1. **Activity:** You may be up as you desire and tolerate.
2. **Diet:** You may slowly return back to a regular diet.
3. **Pain:** If you stay overnight in the hospital, the I.V. pain medication will be discontinued and you will be switched to pain pills. The surgeon and the other doctors assisting him will write for your pain medications before you go home. Please let them know of any drug allergies.
4. Your **drain** is generally taken out the morning after surgery. In some cases, it may be left in when you go home. If you go home with your drain, please follow the surgeon's instructions to remove it within 2-3 days according to the amount of drainage. Please note that the drain will come out as you pull off the dressing.
5. **Occupational and Physical Therapy:** The surgeon may have an occupational therapist and/or physical therapist see you while you are in the hospital to help to determine if you will need any extra assistance at home, though this is generally not necessary.

POST-OPERATIVE INSTRUCTIONS

Wound Care:

- If your incision is not draining any fluid, keep your incision open to air. If there is some drainage, apply dry gauze and secure in place with tape. Change the dressing at least 1 time per day.
- Keep your incision area clean and dry 4 days after surgery. You may gently wash the area around (not over) the incision and pat it dry but no showers until the 5th day after surgery
- If you have steri-strips (tape strips), let the steri strips fall off by themselves. If they have not fallen off in 2 weeks - please remove them.
- Do not put any kind of ointments or antimicrobial solutions over the incision or steri strips.
- **If you notice any drainage, redness, swelling, or increased pain at the incision site- please call the office and report your findings.**

Showering:

- You may take a shower after 1 week if the incision is not draining any fluid.
- After 1 week, you may wash the incision with soap and water and then pat dry. No need to cover the incision-leave open to air.
- DO NOT take a bath in the bathtub or get into any type of pool for at least 4 weeks, or until the incision is well healed.

Activities:

- You may walk as much as you like. Walking is good for you.
- You may engage in sexual activities as long as it is not painful. You should be in a lying position with your partner on top.
- You may recline in a reclining chair.
- You may drive after you are no longer taking narcotics.

Restrictions:

- If needing to sit in a straight back chair for a long period of time, use a towel roll or lumbar support device in the lumbar area while sitting.
- Do not pick up any objects weighing more than 20 pounds for at least 6 weeks following your date of surgery.
- Avoid stooping, bending or twisting at the hips for 6 weeks.
- No athletic activities until you have discussed your limitations with the surgeon at your 6-week check up.

Follow-up appointment: If no appointment has been scheduled for your 6 week appointment, within a few days of your discharge, please call 615-875-5100 to set up an appointment.