OrthoVirginia

B. Thomas Mazahery, M.D

Lumbar Discectomy/Laminectomy Surgical Information Packet

As you prepare for surgery it is common to have many questions. This packet is provided to help answer some of the most commonly asked questions, and to help you prepare for a smooth and successful operative experience. Please feel free to contact Dr. Mazahery and his staff for any additional questions you may have.

Included in this Packet:

Important Contact Information

- Dr. Mazahery's Surgical Scheduler- Tiphiny **(703) 810-5202 Ext. 1422**
- Dr. Mazahery's Physician Assistant- Sarah Hilton, PA-C **(703) 810-5202**
- Reston Hospital Pre-Operative Interview **(703) 689-9005 Option#1**
- Fairfax Hospital Pre-Operative Interview **(703) 970-6565**

Preparing For Surgery

There are important steps to follow prior to your surgery to ensure you are prepared for your surgical procedure. Below is a list of things which need to be completed before your surgery date.

1. Pre-Operative Labwork
    a. You will be given a prescription for labwork to be completed within 1 month prior to your surgery date
    b. We recommend that you complete your pre operative labwork at the hospital as certain labs can only be performed at the hospital
    c. Please ensure the results of this labwork are faxed to Dr. Mazahery's office at **703-810-5420**

2. Medical Clearance
    a. You may need medical clearance from your primary care physician within 1 month prior to your surgery date
    b. Please ensure your medical clearance is faxed to Dr. Mazahery's office at **703-810-5420**

3. Pre-Operative Hospital Interview
    a. You will need an appointment at the pre-operative department at the hospital to review your medical history in preparation for anesthesia.
    b. This pre-operative interview should be completed before your appointment for medical clearance with your primary care physician. This will ensure your labs are completed and available for your primary care physician to review. Call the hospital to schedule this appointment. Call Reston Hospital at **703-689-9005 Option #1** or Fairfax Hospital at **(703) 970-6565**.

4. Surgical Specialty Center of Mid Atlantic
    a. If you are having your surgery as an outpatient procedure at Surgical Specialty Center of Mid Atlantic, you will not need to do a pre-operative interview at the hospital. The surgery center will contact you for your pre-operative interview.

During this time it is also important to consider the amount of time you will need off work after your procedure and discuss this with your employer. It is also important to plan ahead for what help you may need at home after surgery and discuss this with family and friends. Arranging this prior to surgery will help you be able to focus on your recovery post-operatively.

Preparing For Surgery

As your surgery date is approaching, review this checklist to ensure all the steps are completed.

2 Weeks Before Surgery:

- Pre-Operative Interview with Hospital Scheduled and pre-operative labwork completed. _____
  You will need to have a nasal swab pre-operatively to screen for MRSA/MSSA. This will be arranged through the pre-operative department at the hospital
- Pre-Operative Medical Clearance Completed/Scheduled _____

1 Week Before Surgery:

- Stop taking Aspirin and antiplatelet medications, such as Plavix. Stop taking anti-inflammatories (such as Advil, Ibuprofen, Aleve, Motrin, Voltaren, etc.) _____
- If Aspirin or antiplatelet medication is prescribed by your doctor, please consult this physician prior to stopping to make sure this is appropriate. _____

2 Days Before Surgery:

- Check with the hospital for arrival time day of surgery _____

Night Before Surgery:

- Do not eat or drink anything past midnight unless otherwise instructed by the anesthesiologist _____
- You will shower with a soap called Hibiclens the night before your surgery. This will be given to you by the hospital.

What to Expect During Your Hospital Stay

Day of Surgery:

1. Remember to **bring your MRI** if you did not leave it at the office prior to surgery

2. **Registration** at the hospital
    a. The hospital will direct you where to go for registration

3. **Pre-Op Holding**
    a. In pre-op holding you will be given a gown to change in to and given a bag for your personal belongings. You will meet your holding nurse who will review your chart and start your IV. You will be given pre operative medications. You will also meet with your surgical team including the anesthesiologist, nurse anesthetist, and surgical nurse. You will see Dr. Mazahery prior to your surgery. Your family member can stay with you until you are transferred to the operating room.

4. **Operating Room**
    a. You will be taken to the operating room. Your family will be directed to the waiting room. Dr. Mazahery will meet them there when your surgery is complete.

5. **Recovery Room**
    a. When your surgery is complete you will be transferred to the recovery room to be monitored. You are typically here for 1 to 2 hours. If you are having a same day surgery, you will then be transferred to secondary recovery, and your family will be notified when they can see you. If you are being admitted to the hospital, you will be transferred to your room and your family will see you at that time.

What to Expect During Your Hospital Stay

Most commonly, after a discectomy you will be discharged home after your surgery.

If you have a laminectomy, you may be discharged home after surgery, or stay overnight at the hospital and go home the next morning.

Your post operative instructions are included below for your review:

HOME CARE AFTER LUMBAR DISCECTOMY

ACTIVITY

- You can climb **stairs** just try not to over-do it.
- **Sleep** either on your back, stomach or side. You may use pillows for support placed behind your back or between your legs.
- Do not sit for more than 30 minutes at a time.
- It is important to begin a **walking** program once you leave the hospital.

Day 1 (at home): Walk 1 block in the morning and 1 block in the afternoon/evening.
After Day 1: Increase your distance 1 block per day as long as it is comfortable. You should be walking 1-2 miles per day when you return for your next visit.

NOTE: If you need to lift or pick up an object (less than 5 pounds) from the floor, squat with your knees bent; do not bend at the waist.

HOME CARE AFTER LUMBAR DISCECTOMY

LIMITATIONS

- No **driving** for 3 days or while on narcotics. You may be a passenger in the car, but limit rides to 30 minutes.
- No **lifting** more than 5 pounds for the first 2 weeks. No lifting over 25 pounds for 4 additional weeks (6 weeks total)
- No sports activities (except the walking program) until after your first post-operative visit.
- No sexual activity for 1 week, after that if comfortable while lying on your back.

RETURN TO WORK

Your return to work will depend on your recovery and the type of work you do. You must discuss this with your doctor before you return to work

INCISION CARE

Caring for your incision at home is important to prevent infection. Please follow the steps below on incision care:

- You may remove your **dressing** 2 days after your surgery. If your incision is no longer draining, it is preferred you leave your incision open to air. You can cover your incision with a dry dressing if this is more comfortable, but you should change this dressing daily.
- You may **shower** 3 days after your surgery. No direct water pressure over the incision, but water can hit the top of you back and roll over the incision. Pat dry with a clean towel. No tub soaks.
- Your incision has been closed with suture material under the skin and covered with steri-strips (small pieces of surgical tape) on the skin. The steri-strips will gradually peel off as they get wet when you take a shower. This is normal and expected.

HOME CARE AFTER LUMBAR DISCECTOMY

PAIN MANAGEMENT AT HOME

You may have an occasional increase in the low back, leg pain and/or numbness after surgery during the healing phase. This is normal and is caused by inflammation (or swelling) of tissue in your low back. To reduce the pain, there are several approaches to try:

- Avoid sitting more than 30 to 60 minutes at a time for the next 48 hours.
- Decrease your activity for the next 1-2 days.
- Take the pain medicine as directed by the doctor. You may take over the counter anti-inflammatory medications (ibuprofen, Motrin®, Advil®, Aleve®) as instructed on the bottle. You can take Tylenol to help with pain control if the narcotic medication you were prescribed does not also contain Tylenol/acetaminophen.

Narcotic pain medicine causes constipation. Eat plenty of foods with roughage (bran, oat, fruit, applesauce) and drink a lot of fluids, especially prune juice to prevent constipation. You can also take over the counter stool softeners such as Colace as needed.

You will be given a prescription for pain medication after your surgery. We anticipate you will no longer require narcotic pain medications 1-2 weeks post operatively.

HOME CARE AFTER LUMBAR DISCECTOMY

FUTURE FOLLOW-UP VISITS

1st post op appointment: This usually occurs 1 to 2 weeks after your surgery date. **Call Dr. Mazahery's office to confirm the date and time** of your first post operative appointment. **703-810-5202**

CALL YOUR DOCTOR IF YOU HAVE ANY OF THE FOLLOWING

1. A temperature of 101 F (38.3 C) or greater on 2 readings taken 4 hours apart
2. An increase in pain, redness or swelling around your incision.
3. Drainage from your incision.
4. Develop difficulty urinating or controlling your bowel movements.
5. Increased swelling in your ankles or feet.
6. Increasing weakness of your legs
7. Redness, warmth and tenderness on the back of the calf on you lower leg

IMPORTANT PHONE NUMBERS

Dr. Mazahery's office: (703) 810-5202, Monday through Friday 8:30am-5:00pm

For emergencies on nights and weekends, please call (703) 810-5202 and have the on call provider paged. You will need to leave your number and the doctor will call you back shortly.

Additional Information Regarding Spine Surgery

You have discussed your surgical procedure as well as risks and benefits with Dr. Mazahery. For additional information, and to review pictures and animations of surgical procedures please refer to Dr. Mazahery's website at:

www.thomasmazaherymd.com

Surgical procedures reviewed on Dr. Mazahery's website include:

Lumbar Discectomy
Lumbar Laminectomy

Additional Information Regarding Spine Surgery

Anatomy

Understanding your spine and how it works can help you understand why you have low back pain. Functions of the spine include protecting the spinal cord and nerves, providing flexibility and motion, and providing structural support for an upright posture.

Vertebae- Your spine is made up of bones, called vertebrae, which are stacked on top of one another.

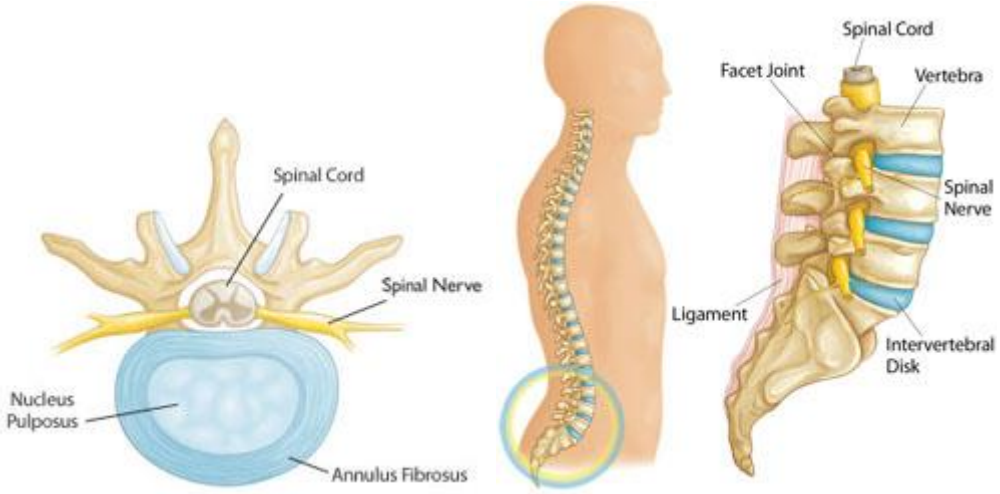
Intervertebral discs- The intervertebral discs are made of cartilaginous material and are located between the vertebrae to provide motion and cushioning between the vertebrae. The discs are made up of an outer layer called the annulus, and an inner material called the nucleus pulposus.

Spinal Cord and Nerves- Sophisticated networks of nerves travel through the spinal canal carrying messages between your brain and muscles. Nerves branch out from the spinal cord through openings in the vertebrae.

Additional Information Regarding Spine Surgery

Muscle and Ligaments- There are a number of muscle and ligaments that provide support and stability for your spine and upper body. Strong ligaments connect your vertebrae and help keep the spinal column in position.

Facet Joints- The facet joints work in conjunction with the intervertebral discs to allow motion in the spine.



Causes of Low Back Pain

There are many causes of low back pain. Back pain can occur after a specific movement such as lifting or bending. Sometimes there is no specific injury, but just getting older can cause degenerative changes in your spine that play a role in many back conditions.

Over-activity/Muscle spasms

One of the more common causes of low back pain is muscle soreness from over-activity. Muscles and ligament fibers can be overstretched or injured and can cause pain and stiffness. Muscle spasms can develop that cause low back pain.

Additional Information Regarding Spine Surgery

Causes of Low Back Pain

Disk Issues

There are a few different issues that can happen with the intervertebral discs that can cause back pain.

Annular Tear- There is an outer layer of the disc called the annulus which can develop a crack or tear. When this occurs it can cause inflammation and back pain. Annular tears typically improve over time as your body heals, and symptoms can be managed with anti-inflammatories, physical therapy, or cortisone injections.

Disc Herniation- Sometimes referred to as a "slipped" or "bulging" disc. This occurs if the central portion of the intervertebral disc, the nucleus pulposus, "leaks" outside the outer layer of the disc. A herniated disc can be caused by a trauma, but most commonly occurs without any specific injury. If the piece of disc that has leaked out causes compression on a nerve, you can have pain that radiates down your legs.

Disc Degeneration- As we age, the intervertebral discs can "wear out" and have decreased hydration. This can affect the ability of the disc to provide cushioning between the vertebrae. This can cause the vertebrae and facet joints to rub together and cause pain and stiffness. It is important to realize however, that disc degeneration does not always cause pain.

Lumbar Spondylolisthesis

Changes from aging can make it hard for your joints and ligaments to keep your spine in the proper position. You can have too much motion in your facet joints, which can cause one vertebra to slip forward on top of another. If the vertebra slips forward too much it can cause decrease space for your nerves. This can cause compression on a nerve or crowding of the nerves.

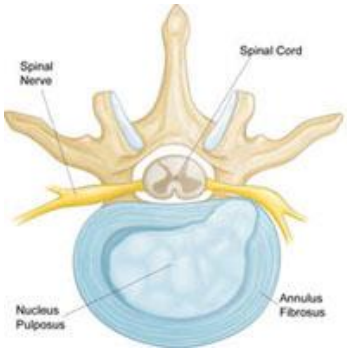
Spinal Stenosis

Spinal stenosis is a narrowing of the spinal canal that causes compression on the nerves and spinal cord. This can result from degenerative changes in your spine causing bone spurs and thickened ligaments. Lumbar spondylolisthesis can also lead to stenosis. Symptoms of lumbar stenosis include back pain, leg pain, numbness/tingling, or weakness of your legs. You may also note cramping in your calves when walking.

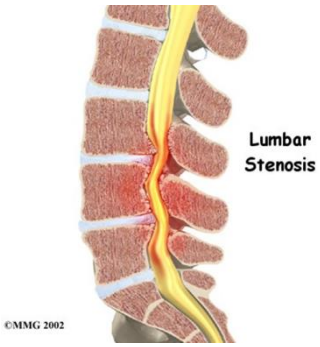
Additional Information Regarding Spine Surgery

Scoliosis

This is an abnormal curve of the spine that may develop in children, most often during their teenage years. It also may develop in older patients who have arthritis. This spinal deformity may cause back pain and possibly leg symptoms, if pressure on the nerves is involved.



Disc Herniation



Possible Complications of Spine Surgery

As with any surgery, you need to consider the risks and benefits of the procedure before proceeding with surgery. Complications vary depending on the extent of your surgery, and your overall health prior to surgery. Below is a list of the possible complications to consider prior to surgery.

Anesthesia

You will require general anesthesia for your procedure. General anesthesia is typically safe for healthy individuals. Underlying medical conditions can increase your risks with general anesthesia. These risks include, but are not limited to, heart and lung issues, harm to your vocal cords or teeth, mental confusion, stroke, and death. You can discuss these risks further with the anesthesiologist prior to your surgery.

Possible Complications of Spine Surgery

Blood Clots

There is a risk of developing deep venous thrombosis (DVT), or blood clots, during or after surgery. These blood clots typically develop in the legs or lungs (pulmonary embolism). Blood thinners are typically not used after spine surgery due to the risk of post-operative bleeding. It is important to minimize the risk of blood clots by early mobilization after surgery, as well as placing sequential compressive devices on your legs while immobile. Symptoms of a blood clot include pain, redness, warmth, and swelling, commonly around the calf. Also monitor for increased shortness of breath or fever.

Lung Problems

It is important to keep you lungs expanded after surgery. General anesthesia and immobility can decrease your lung function, which can predispose you to developing lung infections. Early mobilization and use of a breathing device called an incentive spirometer will help decrease this risk.

Dural Tear

The thecal sac (the area that encloses the nerves and spinal fluid) is covered by a thin tissue called the dura. The dura can tear during surgery causing spinal fluid leakage. This occurs in 0.3%-13% of primary surgeries and up to 17% of revision surgeries. Symptoms include headache that is worse with sitting up and relieved when laying down, sensitivity to light, and clear fluid leaking from the incision. A dural tear can be repaired during surgery. You may be required to lay flat after surgery to assist with the repair. Occasionally, additional surgery is needed to reinforce the repair of the dura.

Nerve Injury/Spinal Cord Injury

Although rare, there is a risk of nerve and spinal cord injury when operating around these structures. Nerve injury can result in weakness, pain, numbness, and tingling of the muscles controlled by the nerves affected. Spinal cord injury can result in paralysis, but this is extremely rare and if there is a pre-operative concern your doctor will discuss this with you.

Sexual Dysfunction can be a result of nerve or spinal cord injury. This risk is higher with lumbar surgery requiring an anterior approach (ALIF) and occurs in up to 10% of cases. Men are at increased risk compared to women.

Possible Complications of Spine Surgery

Recurrent Disc Herniation

Recurrent disc herniation has been reported in 5%-11% of patients after discectomy. Risk factors include traumatic event, young age, male sex, and a history of smoking. Symptoms of recurrent disc herniation include increased back pain and a recurrence of your pre-operative leg symptoms.

Infection and Delayed Wound Healing

As with any surgery, there is a risk of developing post-operative infection. Symptoms of infection at the surgical site include increased pain, redness, swelling, drainage, wound dehiscence, fever, and chills. Antibiotics as well as additional surgery may be needed to treat an infection. You may also have delayed wound healing due to seroma formation. A seroma is not an infection, but can cause increased drainage and delayed wound healing. Wound complications are increased if patients have risk factors such as obesity, diabetes, and vascular compromise.

Bleeding

It is very rare to require a blood transfusion after a discectomy or laminectomy. Multiple level lumbar surgery or bleeding disorders have higher risk for bleeding and requiring blood products. Spine surgery also carries the risk of unexpected bleeding. Care is taken to avoid nearby blood vessels, but the risk of injury varies depending on the type of surgery you are having. The risk of vascular injury is 1 and 5 per 10,000 operations with a lumbar discectomy. The risk of epidural hematoma are rare at 0.1%.

Persistent Pain

Surgery is not a guarantee of resolution of your symptoms, and in rare cases pain can worsen after surgery. You can also have residual nerve pain after surgery due to inflammation, which may take time to resolve. It is important to discuss expected surgical outcomes prior to surgery.

Postlaminectomy Instability

During a decompression procedure it may be noted that there is instability of your spinal column that will require surgical fusion for stabilization. This may occur immediately during surgery, or months to years after your surgical procedure.

Statistics referenced from
Rao, Raj MD (2006) Complications in Orthopaedics- Spine Surgery Milwaukee, WI: American Academy of Orthopaedic Surgeon

Frequently Asked Questions

What are the alternatives to spine surgery?

Many spine conditions can be managed with non-operative treatment options such as **medications**, **physical therapy**, and pain management including **epidural steroid injections**. Discuss with Dr. Mazahery the benefits of surgical versus non-surgical treatment options.

What are my activity limitations after surgery?

You will have some activity modifications and limitations immediately after spine surgery to allow for proper healing and recovery. Early mobilization and walking is encouraged after surgery. Specific limitations for immediate post operative recovery will be outlined in your discharge packet for your procedure.

The long term goal of spine surgery is for you to return to all your normal activities. After you have healed from your surgery, we encourage you to return to all the activities you enjoy including running, skiing, horseback riding, weightlifting, and many other sports!