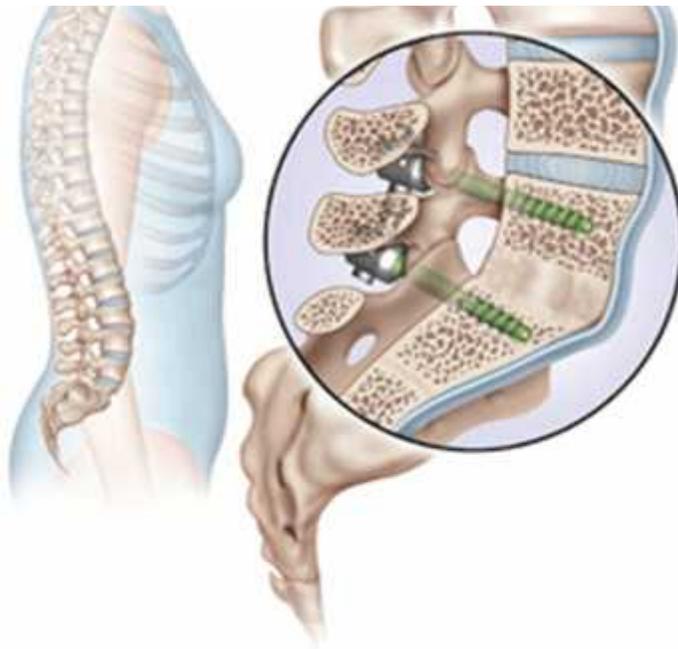




Pre-Surgery Guide for Patients and Family

Thoracolumbar Fusion Surgery



www.drfisherspinesurgeon.com

Dear Valued Patient and Family,

Welcome to NYU Langone Medical Center! Each and every patient is treated with state of the art medicine in a warm and caring environment. We are made for New York, as well as the world!

The goal of this pre-surgery guide is to help prepare you before your upcoming surgery. It is general, and is intended to help give you an overview of what your surgical experience will be.

If you have any questions, please do not hesitate to call my office to review your concerns. As always, my number one goal is a well-informed patient who understands the options as well as the next steps.

Sincerely,

Charla R. Fischer, M.D.



The Goals of Spinal Fusion Surgery

The goals of spinal fusion surgery are to stabilize the painful area of the spine and to alleviate any pressure on the compressed nerves.

What is spinal fusion?

Fusion is a surgical technique in which one or more of the vertebrae of the spine are united together (“fused”) so that motion no longer occurs between them. The lack of motion helps to decrease the back pain. Bone grafts are placed around the spine during surgery. The body then heals the grafts over several months – similar to healing a fracture – which joins the vertebrae together.

Spinal fusion can help in the correction of deformity (spinal curves) the treatment of instability (spondylolisthesis) or management of painful intervertebral discs (degenerative disc disease).

How is spinal fusion performed?

There are many surgical approaches and methods available to fuse the spine, and they all involve placement of a bone graft between the vertebrae. The spine may be approached and the graft placed either from the back (posterior approach), from the front (anterior approach) or from the side (lateral approach). Spinal instrumentation (such as metal devices such as screws, rods, hooks, plates, or cages) is placed to support the spine while the bone graft is healing.

What is spinal decompression?

This is a procedure to remove pressure from compressed (pinched) nerves. This includes removing bone or soft tissue that is causing the pressure on the nerves. Once all the compressed nerves are alleviated of compression, the leg pain usually improves. This removed bone is then used as the bone graft to help the spinal fusion. These procedure (called laminectomy) are often done together with a fusion.

Things to Do Before Your Surgery

1. Discuss With Your Surgeon:

- Any allergies (especially to medications, food)
- Any special concerns (living situation, return to work etc)
- Medications, specifically Aspirin and/or blood thinners (you must discontinue taking any anti-inflammatory medications and birth control pills ONE week prior to surgery)
- Obtaining ALL outside pre-op x-rays and scans (MRIs, CT, Myelograms, Discograms, etc) prior to surgery

2. Complete Your Pre-op Testing

Dr. Fischer's Surgical Scheduler will assist you in setting up surgery and any necessary tests. You will undergo diagnostic testing (xrays, EKG, blood tests, urine etc). Bring your medical history information and a list of your current medications to the Pre-op Testing appointments.

Pre-op testing and Medical Clearance should be done here at NYU:

- There will be fewer delays in getting results (lab tests, x-rays).
- You will become familiar with our center (getting here, parking, getting around the hospital etc.)

Under some circumstances Pre-op testing cannot be done at NYU. In these situations, we will need your help to make sure that all of the information needed to clear you for surgery is sent to us here at NYU a timely fashion.

3. Eat Iron Rich Foods

- Consuming foods rich in iron helps prevent anemia after any surgery. Foods rich in iron include: red meat, egg yolks, dark leafy greens, dried fruit, iron-enriched cereals (check the labels), mollusks (oysters, clams, scallops), beans/lentils/chickpeas/soybeans, artichokes.

4. Stay in Touch

- If your physical condition changes during the week before surgery – cold, rash, cough, fever, or upset stomach – notify Dr. Fischer’s office as she may want to reschedule your surgery.

5. Follow Pre-op Instructions

On the business day prior to your surgery a nurse from the operating room (OR) will call you in the evening to tell you when and where to come on the day of surgery, review your pre-op instructions, and answer your questions.

- Do not eat or drink anything after **midnight** the night before surgery unless otherwise instructed. If your internist instructs you to take any medication the morning of surgery, do so with a **small** sip of water. If you have questions about this, confirm with your internist.
- Use the antibacterial skin wipes the night before and the morning of surgery.
- Do not use alcohol or sedatives 24 hours before surgery.
- If you are delayed in getting to the hospital on the day of surgery please Dr. Fischer’s office.

Anesthesia and Preparation for Surgery

Anesthesia

General anesthesia is the type of anesthesia administered for spine surgery. After your intravenous line (IV) has been placed the anesthesiologist “puts you to sleep” using a combination of medications so you are completely unaware of surgery. This kind of anesthesia generally requires a breathing tube (intubation).

Tell the anesthesiologist and nurse about any problems you may have had with medications in the past.

Blood Transfusion

The blood loss from cervical decompression surgery is quite minimal. The need for blood transfusion depends on your procedure and medical condition. We do not recommend donating blood in advance

During Spine Surgery

Here are some examples of things you might expect with spine surgery:

1. Positioning

Every effort is made to put you in a safe and comfortable position. However it is common to have some temporary aches, pains or swelling after surgery from being in one position for a long time.

2. Antibiotics

These medications are used during and after surgery to prevent infection.

3. Evoked Potential Monitoring

Depending on your surgery, specially trained technicians may place small leads on your limbs and head to monitor nerve function during surgery.

After Your Spine Surgery

1. Recovery Room:

After surgery, you will need careful monitoring as you gradually wake up. You will most likely be moved directly from the Operating Room either to Recovery Room, also called the PACU (Post Anesthesia Care Unit). In the PACU your heart (cardiac) and lung (respiratory) function will be monitored while your anesthesia wears off. An anesthesiologist and your surgical team will monitor your recovery in the PACU. You will remain in PACU until your general condition is stable. You will gradually be given liquids and food. While you are in the PACU visits from family & friends are limited.

2. Regular Orthopedic Floor

After you are transferred to the regular floor from the recovery room, here are some things to expect:

- **Vital signs:** Your vital signs, such as blood pressure, pulse, respiratory rate and temperature, are taken frequently after surgery. Your circulation, your strength, and your sensation will also be checked regularly.
- **Sore Throat:** It is normal to have a sore throat with swallowing after anterior cervical spine surgery. You will be provided a diet with soft foods to help ease this discomfort.
- **Surgical dressing and drainage:** You will have a dressing that covers the surgical site. This will be changed while in the hospital. You may have a drain (small plastic tubes) near the surgical site to remove bloody fluid from under the skin and muscle. This drain will be removed before you leave the hospital.
- **Urine Catheter:** It is likely that you will have a catheter that collects your urine into a bag (Foley Catheter). The catheter is removed once you are able to get out of bed. The first void is the most difficult once the catheter is removed.
- **Cerebrospinal Fluid (CSF) leak:** With any spine surgery there is a possibility of a spinal fluid leak. If this occurs we usually keep you in bed for a few days until it seals.
- **Constipation:** The combination of anesthesia, inactivity, and strong pain medications (narcotics) will slow down your digestive system. Therefore, you may not have a bowel movement for 5-7 days following surgery. You will be given stool softeners. We recommend that you drink lots of water, and eat high fiber foods.
- **Numbness/Tingling:** You may experience numbness, slightly different sensation (“pins and needles”), and even some mild weakness in your legs after surgery. You may feel some

numbness or tingling in the skin around your incision. These symptoms often diminish with time.

- **Preventing Circulation Problems:**

- **Venodynes:** You will have special wraps (called venodynes) placed on your lower legs after surgery. These inflate and deflate to help prevent blood clots.
- Soon after surgery, you will be asked to perform gentle exercises, such as ankle pumps (moving your foot up and down and in circles), to help prevent circulation problems. They will also strengthen your muscles. **To improve your circulation, YOU will need to do these exercises 10 times an hour.**

- **Pain Management:**

- Following surgery, you will have PCA (Patient Controlled Analgesia). The pain medicine is given to you through your intravenous line (IV). You to control the amount of pain medicine you receive by pressing the button.
- If the medicine is making you sleepy (a sign that this is enough medicine for now) then you will be too sleepy to push the dosing button. **REMEMBER**, in order to keep this method of pain control safe, **EVERYONE** must follow the rules. Only **you** as the patient, are allowed to press the dosing button!
- The next day after surgery, you will be switched to oral pain medication (pills) and you will be ready to ease into more activities. You will need to ask the nurse for pain medication when you feel like your pain is increasing, the pain medication will not be given to you automatically all day. If you feel that you are not getting enough pain relief, tell your nurse. You will be asked to rate your pain by using the Pain Scale:

- **Preventing Lung Problems**

- Normally you clear your lungs by taking deep breaths. However, when you have pain or drowsiness after surgery your normal breathing pattern can change. Therefore, you will be given an spirometer by the nursing staff who will show you how to use it.
- This spirometer is a simple device that will help you to take deep breaths. Deep breaths expand the small air sacs in your lungs and to clear out any mucous from your respiratory system. This will help prevent fever and pneumonia. We recommend that you use your spirometer 10 times an hour while in the hospital.
- **Physical Therapy**
 - A physical therapist will work with you in the hospital to help review any range of motion restrictions, and help with walking safely after your surgery.
 - The physical therapist will assess your safe mobility after surgery and make recommendations on whether you are safe to go home, or need some assistance in a rehab facility.
- **Social Work**
 - Based on the physical therapists recommendations, the social worker will help coordinate applications and insurance authorization for the post-hospital care that is needed.

Discharge Process

1. Prescriptions

Just before discharge, your doctor or nurse will give you medication prescriptions for you to fill at your own pharmacy. **If any of your personal medications are with the nurses or stored at the hospital, make sure you get them back at this time.**

2. Nursing Discharge Process

Discharge to home/rehabilitation facility usually happens at the anticipated discharge time of 10 AM. A nurse will review all of your instructions and medications with you.

3. Discharge Instructions

There are very specific discharge instructions based on your surgery. Those can be found at:

<http://drfischerspinesurgeon.com/after-surgery>

After Discharge from Hospital

1. Follow Up Appointment

You should have made an appointment with Dr. Fischer when scheduling surgery. The first post-op appointment is at two weeks to make sure the wound is healing. After that, you will need an x-ray at the appointment if a fusion has been performed. This is so Dr. Fischer can make sure the fusion is healing well.

2. Physical Therapy

Depending on how your recovery is progressing, Dr. Fischer may recommend outpatient Physical Therapy after the surgery. This is discussed at the first post-op visit, so you do not need to schedule any post-op physical therapy in advance.

3. Protection against infection: Antibiotic Prophylaxis

An infection involving the spine following surgery can be very serious. Since an infection can come from any source, you must protect yourself if you undergo any procedure that could increase this risk. For example, a simple dental cleaning allows bacteria to enter your bloodstream and to possibly reach your spine. Be sure to remind your doctor and dentist that you have had spinal surgery so that they may prescribe appropriate antibiotics prior to any procedure.

To prevent infection you should take an antibiotic one hour before having any of the following procedures:

- All dental care (including routine cleanings)
 - Skin Biopsy
 - Podiatry procedures which involve cutting into the skin
 - Cystoscopy
 - Colonoscopy/Endoscopy
 - Dermatologic procedures which involve cutting into the skin
- These precautions should be followed for **one year** after surgery.

Helpful Hints

Recovery At Home

During the first few days/weeks at home, the following tips may be helpful:

1. Follow these general safety measures:
 - Be sure all walking areas are free of clutter.
 - Remove throw rugs.
 - Watch for pets and small children.
2. Store items within easy reach
3. Prepare meals ahead of time and store in freezer.

Your Daily Activities

It is normal to be fatigued after surgery, which gradually decreases as you recover and as you increase your daily activities.

- Walk every day to increase your strength and endurance
- Wear good walking shoes (non-slip) and walk on flat surfaces
- Stairways should be well lit and hold onto the railing

Remember, you make the difference! Your active participation is a major part in your recovery. Although you may want immediate results, please remember to allow time for your recovery from the conditions that existed before surgery and from the surgery itself.