NEUROSURGICAL CONSULTANTS, INC.

800 WASHINGTON STREET
LINDEN BUILDING - FIRST FLOOR
NORWOOD, MA 02062-6615
(781) 769 - 4640
FAX (781) 769 - 3808
www.neurosurgicalconsult.com

MICHAEL GIEGER, MD, ABNS
MARC H. FRIEDBERG, M.D., Ph.D., FACS, ABNS

SPINAL SURGERY
CRANIAL SURGERY
MICRONEUROSURGERY
SPINAL INSTRUMENTATION

Welcome

The doctors of Neurosurgical Consultants want to keep you informed about your hospital stay and discharge. Please review the information and talk with your doctor(s) or the hospital staff about your progress.

Anterior Lumbar Discectomy and Fusion with or without Posterior Fusion and Stabilization

What is an anterior lumbar discectomy and fusion?

Anterior Lumbar Discectomy and Fusion is a procedure that enables the neurosurgeon to remove a lumbar intervertebral disc and replace it with a cage, a hollow spacer with holes in its wall. The center is filled with bone or a bone substitute, which then grows through the openings and fuses to the lumbar vertebrae above and below. This surgery allows the neurosurgeon to normalize degenerative spinal anatomy, take pressure off nerves as they exit the spine (at the level of the degeneration) and stop excessive motion between two lumbar vertebrae.

Description of the surgery:

Before surgery, intravenous antibiotics are administered to decrease the risk of infection. You will be anesthetized (given general anesthesia) and intubated (a tube is placed in the windpipe) while lying on your back. A catheter is placed in the bladder to drain the urine during surgery. The surgery is performed with a vascular/abdominal surgeon. An incision is made on the abdominal wall. Dissection is carried out by gently retracting the abdominal contents to one side. This enables the surgeon to see the front part of the lower spine. Vascular structures in front of the spine may be moved to provide the final exposure of the disc. Once this has been completed, the neurosurgeon confirms the disc level using the fluoroscope, an x-ray machine showing live pictures on a video screen. The disc is removed. The space between the two vertebral bodies is

distracted (spread open). The bone graft is prepared and then placed in a device that maintains the space between the two vertebral bodies. The device is then inserted and secured in place. Sometimes, a metal plate is attached to the vertebra above and below the "fused" interspace to give additional stability. Some patients need decompressing surgery on the back side of the spine and /

or stabilizing hardware that is placed from the back into the posterior part of the spine, see below. The wound is then irrigated with antibiotic solution to decrease the likelihood of infection. Absorbable stitches are used under the skin to close the incision. Stitches, staples or special "skin glue" are used to close the skin. A sterile dressing is placed over the incision. Your breathing tube is removed (extubated) and you will be taken to the recovery room.

If needed, you will be repositioned prone (face down) on the operating table so that the back can be prepared for surgery. The incision is usually made in the midline overlying the levels needing correction. After retracting the soft tissues (muscle, etc.) the bone is exposed. Another x-ray may be taken to confirm the level. Bone overlying the spinal canal is removed, as necessary, to further decompress the nerves or to provide access for disc removal, etc. Sometimes, the removed bone is laid against the remaining part of the vertebra so that this region is fused, as well; and additional hardware is added from the back to offer additional stabilization to the spine. The wound is then irrigated with antibiotic solution to decrease the likelihood of infection. Absorbable stitches are used under the skin to close the incision. Stitches, staples or special "skin glue" are used to close the skin. A sterile dressing is placed over the incision. Your breathing tube is removed (extubated) and you will be taken to the recovery room. Sometimes a drain is left; it is generally removed a few days after the surgery.

How will your family know when the surgery is completed?:

Your neurosurgeon will speak with your family members in the family waiting area or call them at home when the surgery has been completed.

What to Expect After Surgery

Day of Surgery

Following the surgery you will spend a few hours in the Recovery Room (PACU). From there you will be taken to a regular hospital room where nurses who specialize in caring for surgical patients will monitor you. Visitors may be allowed in the Recovery Room for a few minutes; family and friends can visit more freely when you are sent to a regular hospital room. Many patients go home on the day of surgery (anterior procedure only). Depending on their needs, other patients go home one to five days later.

- The nurses will monitor your temperature, blood pressure, pulse and respiration level.
- The nurses will give pain medicine initially by vein and then by mouth, as you need it.

- It is not uncommon to feel nauseous after surgery. This is often due to the anesthesia. Medicine is available to help relieve the nausea and any vomiting. Due to retraction of the abdominal contents during surgery, patients may not be able to eat for one to three days after the operation.

- The catheter will be left in for one to two nights after surgery. Although you may have the feeling that you need to void, your bladder will be continuously drained by the catheter.

- Activity: You will be encouraged to walk as soon as you are comfortable. Walking helps to prevent blood clots from forming in the legs after surgery. You should avoid bending over, sitting for more than 1 hour, or lifting anything heavier than five pounds.

- Constipation often occurs from the use of narcotic pain medications. Stool softeners and other medications may be needed to help prevent constipation.

- After surgery, it is important to do deep breathing exercises. This prevents pneumonia from developing. You will use a device called an incentive spirometer to help you deep breathe.

Discharge: You can plan on going home one to three days after surgery.

Lumbar Brace

A lumbar brace, if ordered by your neurosurgeon, must be worn any time you are upright. You should continue using your brace until instructed to remove it, typically in 12 or more weeks.

Once You Are Home

When to call your doctor?

One of the three neurosurgeons from Neurosurgical Consultants Inc. is on call each day. That means that 24 hours a day either your neurosurgeon or his covering associate can be reached, if needed. Call the office at (781) 769-4640 if there is drainage from the wound, a fever greater than 101 degrees Fahrenheit, new weakness, numbness, or worsening pain. You may experience some pain or tingling radiating down the leg for several days after surgery. This is caused by

nerve swelling which should subside. You should call your doctor if the pain in your leg is the same or worse than before surgery.

Pain medication:

You should only be taking narcotic medication such as Percocet or Vicodin for the first few days after surgery for incisional pain. You should **not** use any anti-inflammatory medications, such as aspirin, Motrin, ibuprofen, etc., until told by your neurosurgeon that it is safe.

How to care for your surgical incision?

There will be a gauze or Mepilex dressing secured with silk or clear plastic tape. Under the dressing will be either stitches or skin glue, possibly covered by Steri-Strips; or skin staples. Steri-Strips are small pieces of special tape that will fall off on their own once they start getting wet, typically 7-10 days after surgery.

The skin glue is clear synthetic glue that holds the skin edges together and acts as an impermeable barrier to water. It will start to flake off 7-10 days after surgery.

You may shower after 5 days, but must take precautions to keep the dressing dry. This can be done by covering the dressing and at least 4 inches of surrounding skin with heavy plastic, such as from a clean, heavy garbage bag, secured with 2 inch tape applied on all sides completely sealing the edges.

If you have a Mepilex (silver impregnated) dressing, it should be left in place for 5 days and then can be removed. After removal, the wound can be left open. However, if desired, it can be re-dressed with gauze for patient comfort. If the dressing gets wet, it **should** be removed and replaced with a clean, dry gauze dressing.

If you have a gauze dressing, it may be removed after 5 days. After removal, the wound can be left open. However, if desired, it can be re-dressed with gauze for patient comfort. If the dressing gets wet, it **should** be removed and replaced with a clean, dry gauze dressing.

If you have Steri-Strips, the operative area and Steri-strips should be covered with plastic to keep the area dry during a shower. This can be done by covering the operative area, Steri-strips, and at least 4 inches of surrounding skin with heavy plastic, such as from a clean heavy garbage bag, secured with 2 inch tape applied on all sides completely sealing the edges. After 5 days you no longer need to protect the Steri-strips during shower.

Patients may shower but should not bathe or swim for at least 3 weeks. Your incision should not be immersed in water until all scab has fallen off.

Weeks 1-2

Unlimited walking is allowed. You may walk up stairs. You should not lift any object greater than 2 pounds. Do not drive, but you may ride as a passenger. You may have sexual relations when you feel that you are ready. During sexual relations, you should avoid positions that cause discomfort, as this may cause re-injury.

Week 3

Unlimited walking is allowed. You may walk up stairs. Do not lift any object greater than 10 pounds. If you feel that you have full function of your legs with no impairment, you may begin driving. If there is any weakness or sensory deficit, such as numbness, you should not drive. When you initially start to drive, stay close to home and avoid heavy traffic. Slowly work your way up to more extensive driving. During sexual relations, you should avoid positions that cause discomfort, as this may cause re-injury.

Week 4

At this point you should have your post-operative visit. Make sure to discuss issues such as physical therapy and returning to work. Many people can return to work sooner, if no lifting or bending is involved. This should be discussed pre-operatively if you want to return to work sooner. In general, let your body "tell" you what to do. If you do something that is uncomfortable or makes you ache later, you know you have done too much.

Weeks 5-12

You will have regular appointments with your neurosurgeon with periodic x-rays to evaluate the progress of your lumbar fusion.

Week 12

A solid fusion may occur at this point enabling the discontinuation of your brace. You should wear your brace until instructed otherwise by your neurosurgeon.

Your Future

Remember once you have had back surgery you are more susceptible to future back strain. However, with regular back strengthening exercises, a healthy diet, smoking cessation and avoiding potentially harmful activities, you can live an active, comfortable, and productive life.

These instructions are meant to be a guide to recovery from Anterior Lumbar Spine Surgery for patients in our practice. We hope that you find them helpful. They are not a substitute for medical care by a professional. Also, other spine surgeons may have different routines. For more information, visit our Web Site, **http://www.neurosurgical-consult.com**.

Marc H. Friedberg, MD,PhD
Michael Gieger, MD