

What You Need to Know About Cervical Disk Surgery



VANDERBILT  UNIVERSITY

MEDICAL CENTER

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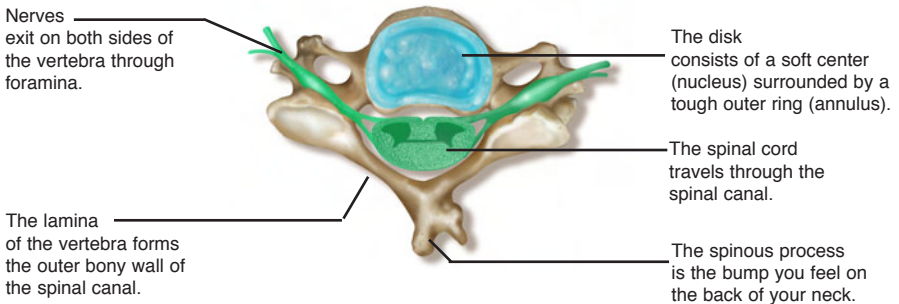
Resources:

www.understandingspinesurgery.com

What is a Degenerative Cervical Spine?

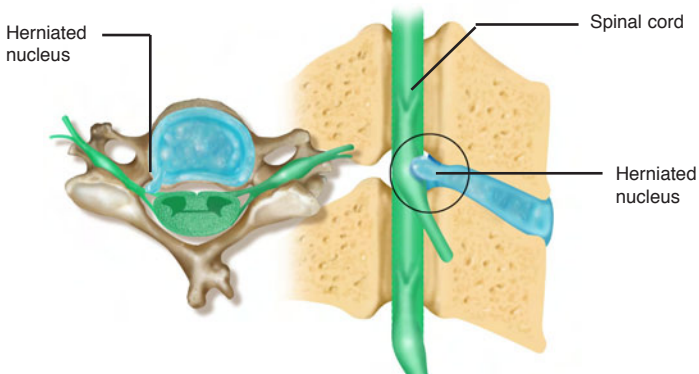
A Healthy Cervical Spine

The normal cervical spine is composed of seven vertebrae. Each vertebrae contains a body, lamina, and pedicles which surround the spinal canal. The discs are located between the vertebral bodies. Each disc contains two parts: a soft gel-like substance called the nucleus and a tough outer band called the annulus.



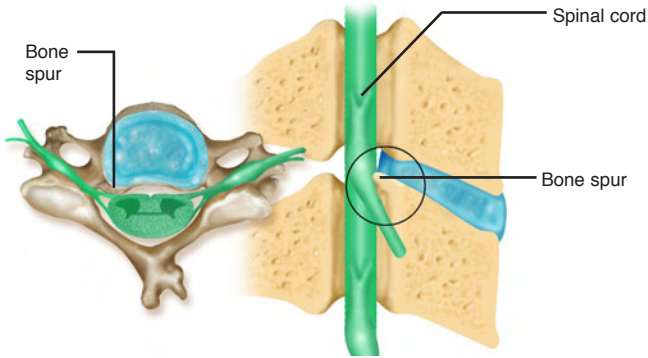
A Problem Cervical Spine

A damaged disc is one of the most common causes of spine problems. A disc may herniate from sudden movement or gradually worsen over time (degenerative disc disease).



The Surgery

Degenerative Disc Disease:

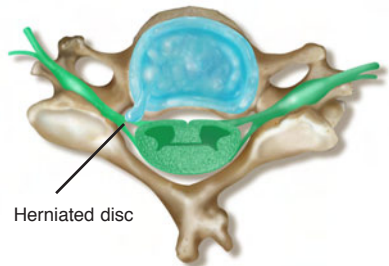


In degenerative disc disease, the discs flatten over a period of time. This causes the vertebrae to get closer together and begin to touch.

The nerves between the vertebrae running through a foramen may be pinched. Pain, numbness, and weakness in the arms could occur when the spinal cord or nerve roots are compromised. This happens because the messages sent from the brain to the rest of the body are interrupted.

Herniated Disc:

A herniated disc occurs when either the annulus tears or the nucleus ruptures through the annulus. When this happens, the nucleus tissue is forced out of position. Because there is limited space between the vertebrae, the herniated disc puts pressure on the spinal cord or the nerve roots. This could cause arm pain or weakness.

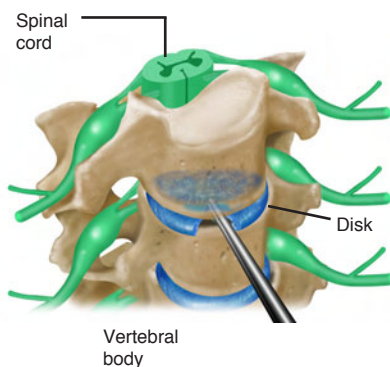


Understanding Your Surgery

Your surgeon will discuss with you the best options for your particular surgical procedure. There are two basic ways the surgery can be performed depending on the location of the damage or preference of your surgeon.

Anterior Approach: Through the Front

Disc Removal: The surgeon will make a one-two inch horizontal incision on the front of your neck, usually on the left side. In order to reach the disc, the soft tissue is moved aside. The herniated, or problem disc is then removed by special surgical instruments.

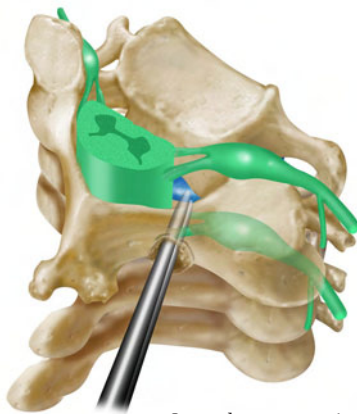
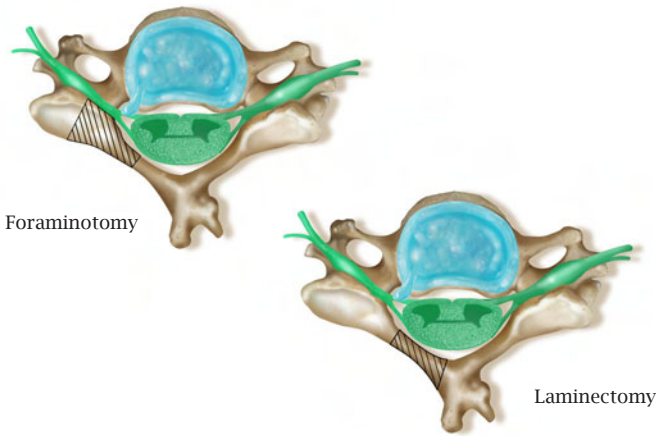


Fusion: The surgeon will fuse the vertebral bodies that were above and below the removed disc. In order to have a fusion, the surgeon may take a small piece of bone from your hip (iliac crest), use a cadaver bone, or use a synthetic bone substance and place it where the disc used to be.

Sometimes a metal plate will be used. The plate contains holes for screws and is placed over the bone graft. The screws are inserted into the vertebral body above the graft and the vertebral body below the graft. This aids in securing the bone plug in place. As you heal, the bone graft and vertebrae grow together.

Posterior Approach: Through the Back

The surgeon will make a vertical incision in the middle of the back of the neck that is about two- three inches in length. The surgeon may do a laminectomy or a foraminotomy to reach the disc. A foraminotomy is the enlarging of the foramen opening by removing the overlying bone. Once the surgeon is able to reach the disc, only the damaged portion is removed.



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Preparing for Surgery

Eating: It is very important that you do not eat or drink anything after midnight the evening before the day of your surgery. This includes drinking water or even chewing gum.

Smoking: Scientific studies have shown that bone heals much better in persons who do not smoke. The spine surgeons strongly recommend that you stop smoking before your spine surgery. You may want to ask your family doctor to assist you in a smoking cessation program suitable for you, or call the Vanderbilt Dayani Center at (615) 322-4751 for their smoking cessation program.

Day of Surgery: On the day of your surgery, plan to arrive at the main admitting office of Vanderbilt University Hospital two hours before the scheduled time of your operation. You will wait in this area until you are escorted to the holding area. Your blood pressure, heart rate, and breathing rates will be measured once you are in the holding area. You will be asked to empty your bladder and change into a hospital gown. You will be administered an IV. The anesthesiologist will meet you in the holding room and give you some medication to help you relax. You will be transferred to the operating room on a gurney. After you are asleep, a tube (Foley catheter) may be inserted into you bladder to drain urine into a collection bag during the surgery. (This will be removed either before you wake up or 24-48 hours after surgery.)

Your Family: Your family may wait in the surgical waiting area located in the main hospital on the first floor near the main elevators. The operating room nurse will call the waiting room desk periodically to report on the progress of your surgery. Your spine surgeon will meet with your family there after your surgery.

After Surgery: Persons having laminectomies, discectomies, anterior or posterior spinal fusions, usually go to the recovery room for two to three hours and then are transferred to the orthopaedic unit in the Round Wing of Medical Center North. The Round Wing is separate from the main Vanderbilt Hospital, so you will be transported through a tunnel connecting the two facilities.

Recovery: You will be closely monitored for the first twenty-four hours of surgery. Your pulse, breathing rate, and blood pressure will be carefully watched. You will be log-rolled from side to back or back to side every two hours. In an attempt to keep your lungs clear, you will be encouraged to cough and deep breath.

When Can I Eat Again?: You will receive IV fluid, antibiotics to prevent infection, and pain medication to ease post-surgical discomfort. The IV fluids will be stopped as soon as your stomach is able to digest food again. You may be asked only to drink sips of clear liquid the first day after surgery. Your diet should be back to normal in one to two days.

Going Home: Patients are observed over night and sent home the day after surgery. Your trip home will be most comfortable if it is accomplished in a car with reclining seats. To make getting in and out of the car as easy as possible, place the seat in a reclined position, back into the seat, and turn your body 90 degrees so that you are facing forward. Adjust the back of the seat to a comfortable position. You may also need a blanket your you trip. If the trip is longer than 30 minutes, get out and stretch for a few minutes every hour. This will reduce stiffness and soreness.

First Month After Surgery:

Do not drive for the first two weeks after surgery. During the first two or three weeks at home, you will find that you will tire easily. This is normal after surgery. You will be sent home with a prescription for pain medication to be taken by mouth. By the end of the first month after surgery, you should no longer require medication stronger than Tylenol. The easiest way to accomplish this is to reduce the amount of pain medication you take each of those first four weeks, until you are not longer requiring pain medication at all.

Exercise: The single most important thing you can do for yourself to encourage recovery of strength and pain reduction is to walk. Try to increase your walking distance every day (refer to the Activity Chart on the next page). You will be enrolled in a spine conditioning program at your first post-op clinic visit. The program consists of aerobic training (bike, pool, treadmill) and general body strengthening.

Activity Chart

Following surgery on your neck

Activities are guidelines only and may be modified for individual variations.

	7-10 days	3 wks	6 wks	3 mos
Shower	Varies	Yes		
Lifting 10 lbs	Yes			
Walking Outdoors	Yes			
Climbing Stairs	Yes			
Car Rides	Yes	Yes		
Cooking, dusting, light chores	Varies	Yes		
Short outings (church, visits)	Yes	Yes		
School	No	Yes		
Air Travel (short distances)	No	Varies	Yes	
Stationary Bike	No	Varies	Yes	
Driving Car	No	Varies	Yes	
Swimming	No	Varies	Yes	
Dancing, slow	No	Varies	Varies	
Vacuuming, laundry, floors	No	No	Yes	
Light Jog	No	No	Yes	
Lifting 10-15 lbs	No	Varies	Yes	Yes
Aerobic Exercise (low impact)	No	No	Varies	Yes
Non-contact Sports (tennis, bowling)	No	No	Varies	Yes
Air Travel (long, frequent)	No	No	Varies	Yes

Vanderbilt Comprehensive Spine Center

One Hundred Oaks
719 Thompson Lane
Nashville, TN 37204
615.875.5100
www.vanderbiltspine.com

This information is intended for education of the reader about medical conditions and current treatments. It is not a substitute for examination, diagnosis, and care provided by your physician or a licensed healthcare provider. If you believe that you, your child, or someone you know has the condition described herein, please see your healthcare provider. Do not attempt to treat yourself or anyone else without proper medical attention. All rights reserved 2010, Vanderbilt University, Vanderbilt University Medical Center, Vanderbilt Children's Hospital.

Other Vanderbilt Spine Care Locations

Bone & Joint

206 Bedford Way
Franklin, TN 37064
615.790.3290

Neurosurgery

Village at Vanderbilt
1500 21st Avenue South, Suite 150
Nashville, TN 37232
615.936.0060

Orthopaedics at Cool Springs

324 Cool Springs Blvd.
Franklin, TN 37067
615.790.4280

Orthopaedic Institute

Medical Center East, South Tower
1215 21st Avenue South
Nashville, TN 37232
615.343.0870