A photograph of a golfer in mid-swing, viewed from behind. The golfer is wearing a light-colored sweater, light-colored trousers, and a watch on their left wrist. The background is a blurred green golf course with a white ball on the green in the distance. The text is overlaid on the right side of the image.

What You Need to Know About Lumbar Discectomy & Decompression

VANDERBILT  UNIVERSITY

MEDICAL CENTER

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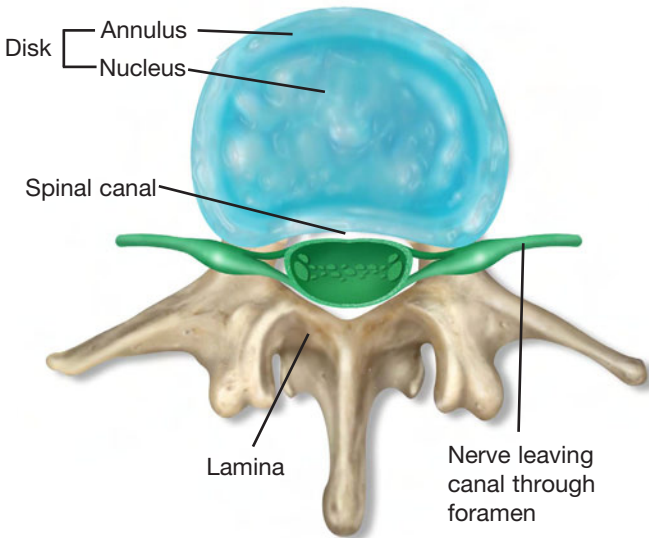
Resources:

www.understandingspinesurgery.com

A Healthy Lumbar Spine

The lumbar spine consists of the 5 lower vertebrae in your back. The vertebrae are the bones that make up the spine. Each vertebra is separated by soft pads of tissue called disks. These disks act as shock absorbers between each vertebra. Each disk contains two parts, a soft gel-like substance called the nucleus, and a tough outer band called the annulus. The spinal canal, which contains the spinal cord, is a tunnel that runs through each vertebra. The nerves are able to exit the canal through the foramen. The foramen is the opening between the vertebra on each side of the spinal canal.

Top view of a vertebra



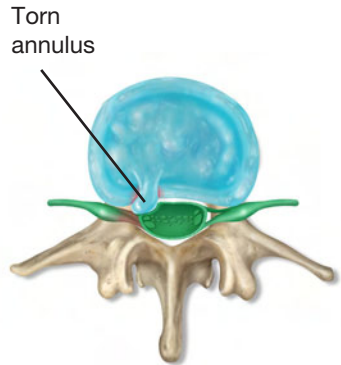
Lumbar Discectomy

A Problem Lumbar 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).

Herniated Disc:

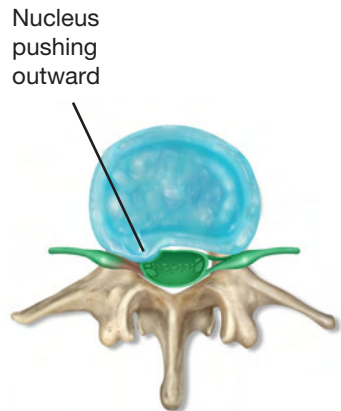
A herniated disc occurs when either the annulus tears or the nucleus ruptures through the annulus. When this happens, the nucleus tissue is forced out of position. Because there is limited space between the vertebrae, the herniated disc puts pressure on the spinal cord or the nerve roots. This could cause back and leg pain. When a bulging disc occurs, the pressure does not actually cause the nucleus to physically rupture through the annulus. The disc may still put pressure on the spinal canal or nerve roots. This may also cause back and leg pain.



An extruded herniated disk

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, which are running through a foramen, may be pinched. Pain, numbness, and weakness in the legs 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.



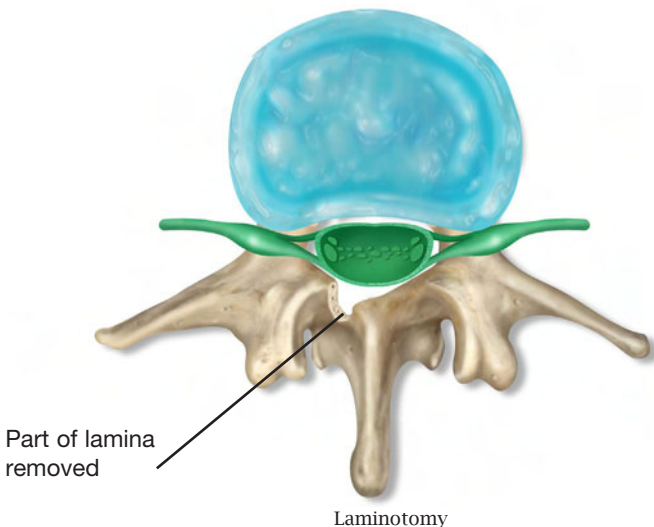
A contained herniated disk

Understanding Your Discectomy Surgery

Lumbar Discectomy

The surgeon will make a vertical incision in the middle of the back at the level of the damaged disc. The incision will be from one to three inches in length. The surgeon may do a laminotomy or a laminectomy to reach the disc. A laminotomy is the removal of a portion of the lamina, which is part of the bone that surrounds the spinal canal. This procedure is used when only a small part of a damaged disc is to be removed. A laminectomy is when the surgeon removes the entire lamina, forming a larger area for access to the damaged disc. This is used for an extensively damaged disc. A laminotomy is usually the procedure of choice.

Once the approach has been made using one of the mentioned procedures, the surgeon will begin to remove the disc. By using a microscope and special instruments, the damaged portion of the disc will be removed. The remaining, healthy disc will remain to function as a shock absorber. This will take the pressure off of the spinal canal or nerve root and alleviate your back or leg pain.

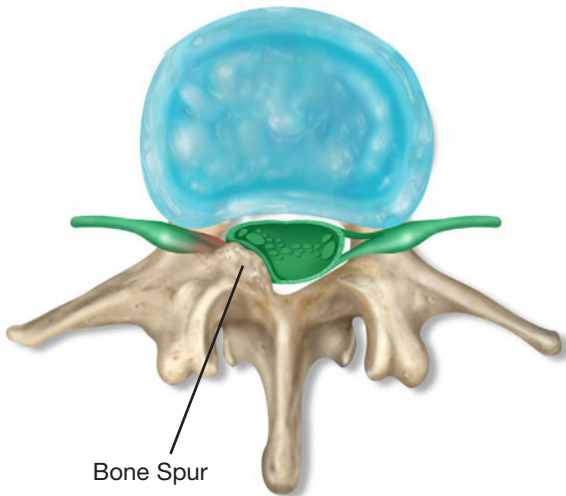


Lumbar Decompression

Spinal stenosis is another of the most common causes of spine problems. Stenosis can result from degenerative changes (spondylosis) or stenosis can be congenital and present early in life.

Stenosis:

Spinal stenosis is the narrowing of the spinal canal or intervertebral foramina. Stenosis can result from bone spurs or ligaments narrowing the foramen or spinal canal. This puts pressure on the spinal cord or nerves and may cause symptoms in your back and leg. You may feel pain, burning, tingling or numbness. Many patients experience leg fatigue and their legs cannot support them as they try to walk. Stenosis is also responsible for certain types of low back, buttock, and hip pain.

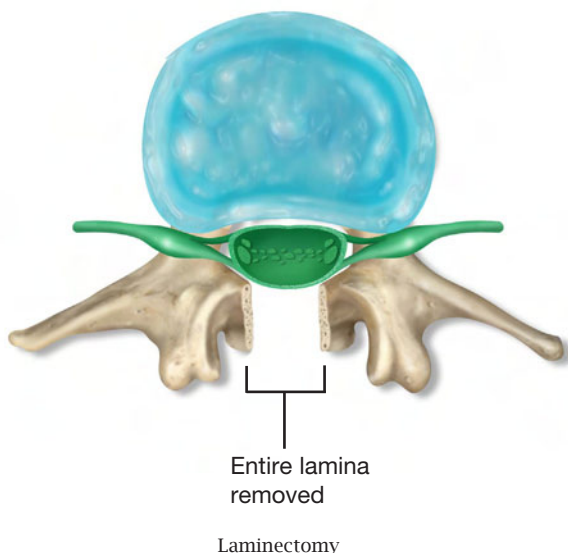


Understanding Your Decompression Surgery

Lumbar Decompression/Laminectomy

The surgeon will make a vertical incision in the middle of the back at the level of the stenosis. The incision will be from one to three inches in length. The surgeon will do a procedure called a laminectomy to reach the bone or ligaments that are causing the stenosis. A laminectomy is when the surgeon removes the entire lamina, forming a larger area for access.

Once the approach has been made using one of the above procedures, the surgeon will remove the bone spurs and problem ligaments with the use of special instruments. This will take pressure off the spinal canal or nerve root.



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.

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

After Surgery: Directly from the operating room, you will go to the recovery room. You will probably be there for two to three hours. You will then be 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.

Going Home: Most patients are discharged the day of surgery. Occasionally you may need to stay one night in the hospital and leave the following morning. 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 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.

After Surgery

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 no 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

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

	7-10 days	3 wks	6 wks	3 mos
Shower	Yes			
Lifting 10-15 lbs	Yes			
Walking Outdoors	Yes			
Cooking, dusting, light chores	No	Varies	Yes	
Climbing Stairs	Yes			
Short Car Rides 15-20 min	Yes			
Short outings (church, visits)	No	Yes		
Stationary Bike	No	Varies	Yes	
Driving Car	No	Yes		
Air Travel (short distances)	Varies	Yes		
School	No	Varies	Yes	
Light Upper Extremity Exercises	No	Yes		
Air Travel (long dist.)	No	Varies	Yes	
Swimming, No Diving	No	No	Yes	
Dancing, slow	No	No	Yes	
Light Jogging	No	No	Varies	Yes
Vacuuming, laundry,	No	No	Varies	Yes
Aerobic Exercise (low impact)	No	No	Varies	Yes
Non-contact Sports (tennis, bowling)	No	No	Varies	Yes
Lifting 15-50 lbs (tennis, bowling)	No	No	Yes	
Horseback riding, water skiing	No	No	No	Varies

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 2006, 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