Minimally Invasive Decompression/ Discectomy

What Is A Minimally Invasive Cervical Decompression?

A cervical decompression is a surgical procedure that involves relieving the pressure placed on nerve roots and/or the spinal cord by a herniated disc or bone spurs in the neck – a condition referred to as nerve root compression.

"Cervical" refers to the seven vertebrae (bones) of the neck. "*Discs"* are the spongy pads between each vertebra. "*ectomy"* means "to take out."

In a cervical decompression or discectomy, the surgeon accesses the cervical spine through an incision in the neck and removes part of the bone – and/or in some cases disc material - that's pressing on the nerves and causing pain or other symptoms. Because it eliminates nerve/nerve root compression, a cervical discectomy is considered a decompressive spinal procedure.

Depending on your condition and specific surgical goals, Dr. Smith may choose to perform this procedure using a minimally invasive approach.

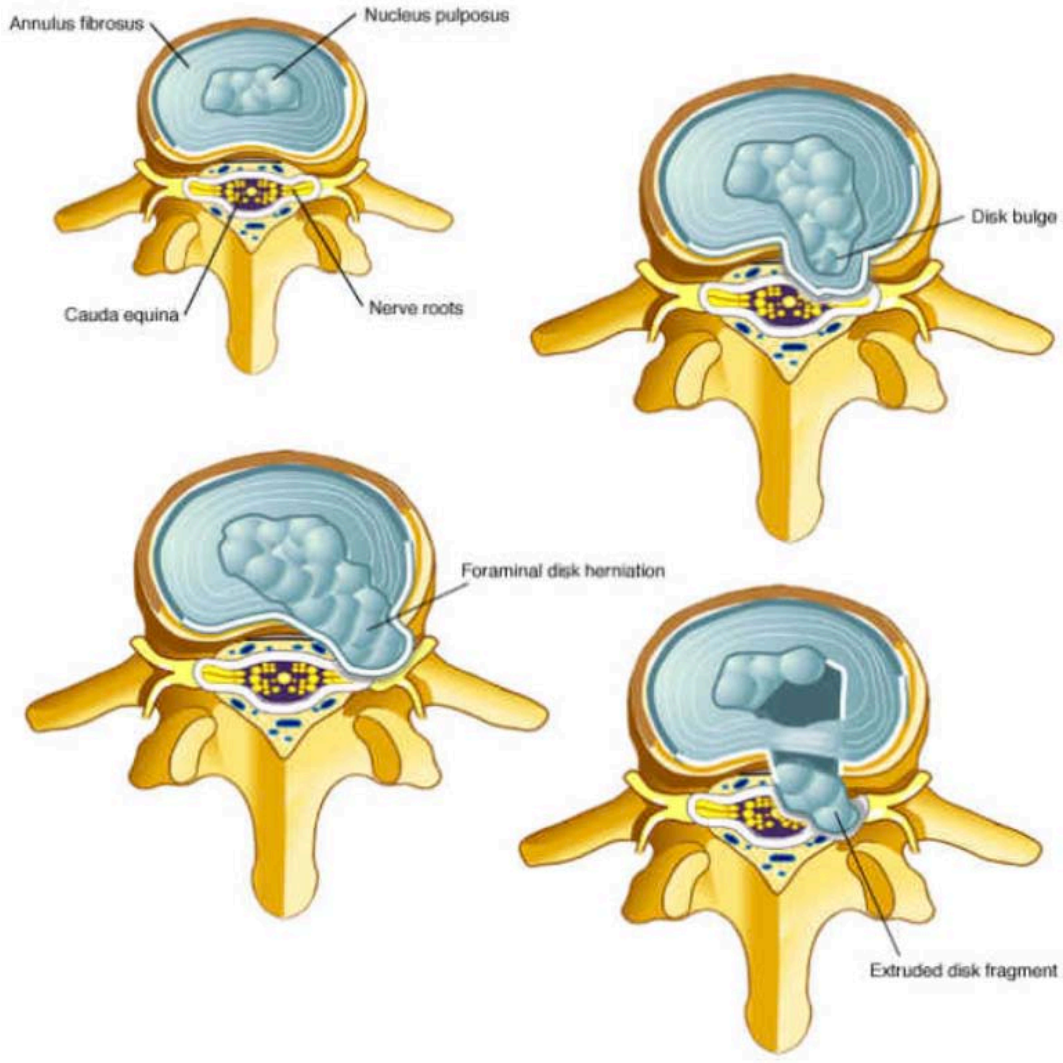
Traditional, open spine surgery involves making a large incision and cutting or stripping the muscles from the spine. This damages the muscles. Especially in the neck, this damage can loosen the joints leading to more pain. Minimally invasive spine surgery involves a small incision or incisions and muscle dilation, allowing Dr. Smith to separate the muscles surrounding the spine rather than cutting them. This attempts to preserve the muscles and surrounding joints.

Why Do I Need This Surgery?

A minimally invasive cervical decompression may be recommended to relieve pressure placed on the spinal cord or spinal nerves/nerve roots. In general, spine surgery is recommended when intervertebral disc or bone material is pressing into or pinching these neural elements and you are experiencing:

- Neck and arm pain that limits your normal daily activities
- Weakness or numbness in your arm(s) or hands
- Impaired bowel and/or bladder function

It is extremely important to understand that as we get older, we all develop “changes” in our spines but not all of us have pain or neurologic problems. Your MRI report may mention many of these changes, but not all of them may explain your pain or neurologic problems. Dr. Smith will discuss which of the changes are causing problems and which are not causing problems. As a result, surgery is not intended to make your spine look “perfect” but instead to only address the changes that are causing your problem.



The disc has moved out of place and is pressing on the nerve.

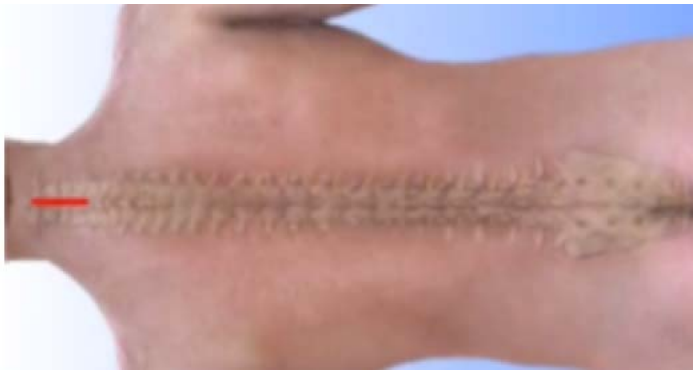
How Do I Prepare For This Surgery?

1) **Stop smoking**. If you smoke, try to stop before your surgery. People who smoke have more disc problems and neck/arm pain than people who don't. The complications of surgery are lower and recovery is quicker in non-smokers.
2) **Stop certain medications**. If you are on blood thinners such as Coumadin (Warfarin), Plavix, Pradaxa, Xarelto, Eliquis, notify Dr. Smith and your primary care physician. These medications will need to be stopped prior to surgery and you will need to remain off them for a period following surgery. If you are on Aspirin you may continue this medication.
3) **Weight loss**. If you are overweight, then weight loss before surgery may lower complications and improve your recovery. Discuss with Dr. Smith and your primary care physician if it is recommended for you to try weight loss before surgery and how to go about the weight loss.
4) **Ask for time off work**. You will need to be off work for at least 2 weeks following surgery. It may be longer in certain circumstances. Make arrangements with your employer. We understand the financial constraints of many patients and the need to return to work as soon as possible. But please understand that if you return too early this may impair your healing and limit the beneficial effects of surgery.
5) **Stop eating and drinking the night before surgery**. It is standard to stop all food and drink the midnight before your surgery, even if your surgery is not first thing in the morning. You may also be asked to stop certain medications as well. If you are allowed to take some of your medications, you may take them with small sips of water. Definitely no coffee or juices the morning of surgery.
6) **Be a little early to the hospital**. The hospital will call you the day before surgery to notify you when to arrive at the hospital. Please be a little early. Dr. Smith performs many surgeries in a day and so your surgery time may be moved earlier than scheduled. Please be near your phone the day before and the day of surgery in case you are called of scheduling changes. Unfortunately, your surgery may also be delayed and we will notify you of this as well.
7) **Ask someone to drive you home and be available after surgery**. You cannot drive yourself home following surgery and therefore you need to make these arrangements ahead of time. Additionally, the hospital mandates that someone be with you for the first 24 hours following surgery due to the anesthesia.

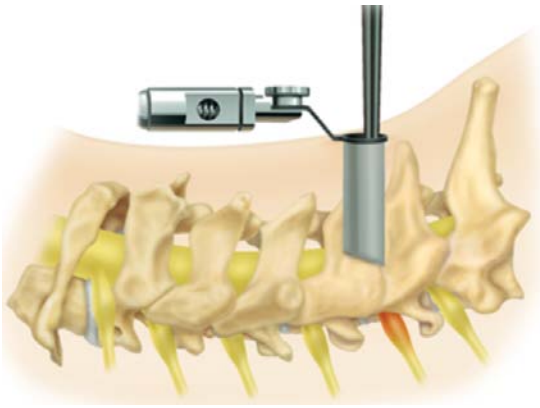
How Is A Minimally Invasive Cervical Decompression Performed?

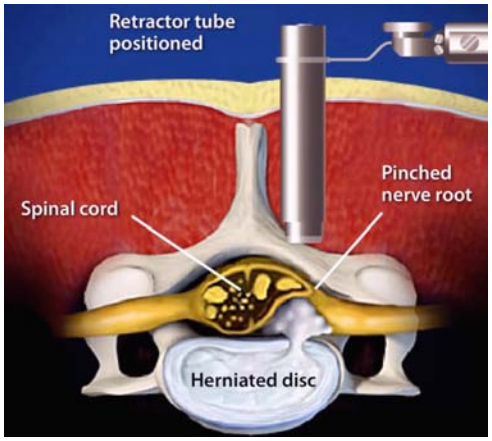
The Operation

The operation is performed with the patient positioned on his or her stomach. You are completely asleep for the procedure, which usually lasts for 1-2 hours.



Technique





After a small ~ 2cm incision is made, the muscles of the spine are dilated, or gently separated, and a tubular retractor is inserted through which Dr. Smith may perform

surgery. Through the tubular retractor, and using a microscope, the bone covering the nerves is removed.

Pressure is relieved by removing of the source of compression

Microdiscectomy - Removing the disc herniation pressing on the nerve root.

Decompression alone - Removing the surrounding bone and/or cyst pressing on the nerve when a disc herniation is not present.

What Happens After Surgery??

You will wake up from surgery in the operating room or recovery area. After about 45 minutes, your family will be allowed to see you. Often the pain you are experiencing before surgery will be better immediately but that is not always the case and sometimes takes longer to improve. You most likely will experience a new soreness around the incision from the surgery itself. This will improve with time and we often provide a prescription for pain medications and muscle relaxers. Weakness and numbness often take days to weeks to months to improve. This is usually an outpatient procedure. You will be up and walking the day of surgery.

What Happens When I Get Home??

You may still be sore following surgery or you may feel great. Either way it is important to be active following surgery, walking and leaving your house occasionally. It will be much harder to fully recover if you stay in bed or sit in chairs all day. However you must not be too active. You cannot drive a car while in pain or on narcotics. You must avoid twisting, flexing or extending your neck. No lifting anything heavier than a gallon of milk. You must leave your bandage on the incision. You may shower the day following surgery but leave the bandage alone, do not remove the bandage and do not submerge the bandage under water. If your bandage comes off on its own, do not attempt to cover it with your own bandage at home. If you start to see any redness or drainage call our office. You must avoid constipation following surgery. Pain medications and muscle relaxers may make you constipated so start taking a stool softener. If after a few days you still have not had a bowel movement, you may need to take a laxative, enema or even a suppository. It sounds trivial, but prolonged constipation will make you feel awful quickly. You need to make an appointment to see Dr. Smith ~2 weeks after surgery. At that point, we may discuss if you need therapy.

If you have any questions after surgery, please call our office between 8:30 and 5pm. If you need medications, remember you need to come to our office to pick them up. We cannot legally call in narcotic or muscle relaxing medications to your pharmacy. So if

you are getting low on these medications, call our office ahead of time between 8:30 and 5pm Monday through Friday so you can pick up a prescription. If you take your medication more than we prescribe, we will not refill it early.

How Long Will It Take Me To Recover?

Dr. Smith will explain your recovery program. This is usually an outpatient procedure.

After your 2 week office visit Dr. Smith will discuss when you may return to work.

Are There Any Potential Risks Or Complications?

All treatment and outcome results are specific to the individual patient. Results may vary. Dr. Smith cannot guarantee pain or neurologic deficit improvement. It is important to understand the risks to surgery and we have listed some below. Additionally, there may be risks we have not listed.

Risks:

1) **Blood loss**. Blood loss is usually very small. But as with any surgery, there is the potential for major or even life-threatening blood loss.
2) **Infection**. Even with antibiotics and careful technique, there is still a small risk of developing infection. This could require antibiotics or even further surgery to resolve. Infections may result in residual pain or neurologic deficits including weakness, sensory changes or bowel/bladder incontinence. Unfortunately this could become permanent.
3) **Reaction to anesthesia**. Anytime you are given medications you can experience an adverse reaction. Even if given medications you have tolerated in the past, you can develop new reactions.
4) **Cerebrospinal Fluid (CSF) leak**. Your nerves sit in a sac, which contains your nerves and spinal fluid. During surgery the sac may accidentally be punctured or opened. When Dr. Smith observes this he will attempt to fix it during surgery. However the fluid may still leak or Dr. Smith may not see it leaking. This may lead to headaches after surgery. At the surgery site a bump under your skin may occur or the fluid may even leak out of the incision. This could lead to infection or other problems requiring further surgery.
5) **Damage to the spinal cord or nerves**. The surgery is performed around your nerves. In the process of decompressing your nerves, injury to the nerves can occur including pain, weakness, sensory changes or bowel/bladder incontinence. Unfortunately this could become permanent. It may require additional surgery to improve.

6) **Recurrence of disc herniation**. After surgery the disc can re-herniate and press into your nerves again. This can happen even from trivial events and can occur anytime from days to years following surgery.
7) **Hematoma**. There is always bleeding during surgery and unfortunately a small amount of blood can collect and press into the nerves. This sometimes requires further surgery to decompress.
8) **Instability**. The surgery involves removing bone and decompressing the surrounding tissues including disc and ligaments from the nerves. Rarely this can weaken the stability of the spine leading to future surgery such as fusion.
9) **Failure to relieve symptoms**. Dr. Smith will do everything possible to give you the best results with the surgery. However, surgery may not relieve all or any of your symptoms.
10) **Reoperation**. As listed above, there are numerous scenarios which may require additional surgery in the future. Whether for reasons listed above or reasons not listed, undergoing surgery now does not preclude you from potentially needing surgery in the future.
11) **Death**. As with any surgical procedure, there is a risk of death. This is rare.