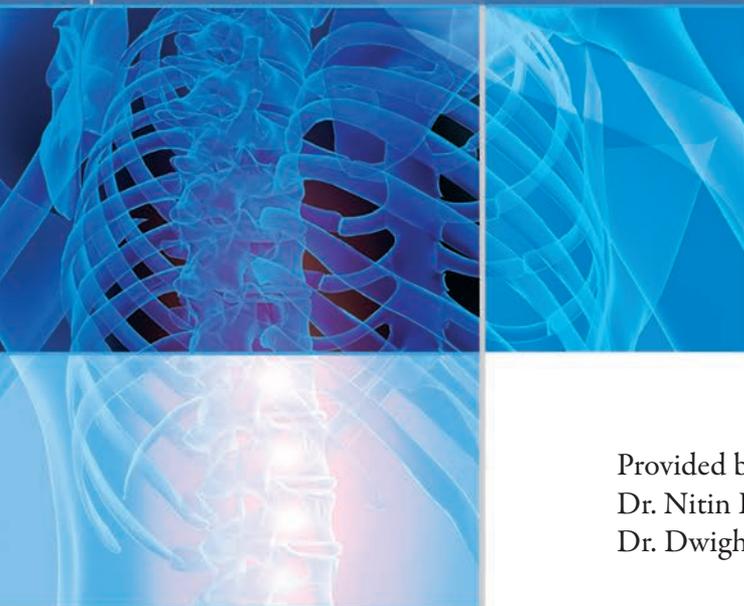


# Lumbar Microdiscectomy and Lumbar Decompression

Instruction Book



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# LUMBAR ANATOMY

The spine provides support for the body. It also provides a protected conduit for the spinal cord and nerves.

The lumbar spine is composed of five lumbar vertebrae. These are separated by the shock absorbing discs. The nerves lie behind the discs.

When looking at spinal anatomy, it is often helpful to look at the spine in segments. A spinal segment is made up of two vertebrae, the intervertebral disc, and associated nerve roots.

**Vertebrae:** The bones of the spinal column. The main part is the round block called the vertebral body. A bony ring is attached to the back, which consists of two pedicle bones and two lamina. The spinous process is the bony knob, which can be felt on the back.

**Pedicle/Lamina:** The two parts of a bony ring, which connect to the back of each vertebral body. A hollow area is formed between the vertebral body and this bony ring. This is where the spinal cord lies.

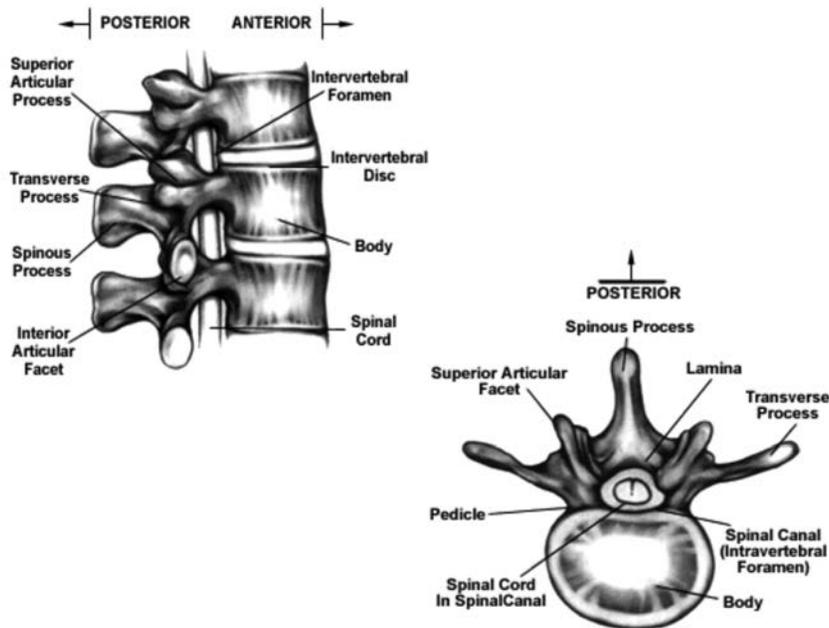
**Facet Joint:** The joints connecting the vertebra. There are two facet joints per vertebra. The facet joints connect the vertebrae and allow movement.

**Disc:** Cushion-like pad, consisting of a jelly like center and a tough outer ring. It acts like a shock absorber, load distributor and spacer.

**Neural Foramen:** The opening in which the nerve roots exit from the spinal cord. If this area becomes smaller, either by age or a herniated disc, the nerve root can get squeezed, thus causing pain and/or dysfunction.

**Spinal Cord:** Pathway in which the brain sends signals to the rest of the body to control sensation and movement.

**Nerve Root:** Bundles of nerve fibers that exit the spinal cord. Each provides a sensation and function to a specific area of the body. Two roots exit the spine at each vertebral level.



## MICRODISCECTOMY

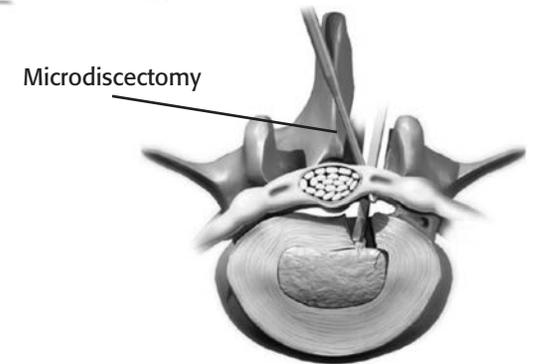
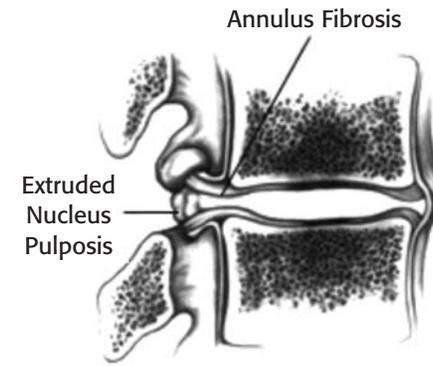
The nerve roots that exit in the lumbar (lower) spine provide function and sensation to the lower part of the body. When these nerve roots are pressed on or compressed, it can cause pain down the leg. Depending on the amount of compression, it may also cause weakness, tingling or numbness.

A disc herniation is a common cause for compression on the nerve roots. When a disc herniates, it pushes outside of the area it normally occupies. Often it will enter the space where the nerve roots exit the spine and press up against them. This causes compression on the nerve root, which produces the symptoms of pain, numbness or weakness (Radiculopathy). The nerve root can also become irritated if the 'gel' from the inside of the disc leaks out of it.

A common procedure to treat a herniated disc, (which is also called a Herniated Nucleus Pulposus (HNP)), is a Microdiscectomy. In a Microdiscectomy, only the portion of the disc causing the compression is removed. Typically less than 10% of the disc.

Often, part of the lamina bone needs to be removed to gain access to the injured disc. This is called a laminectomy.

\*\* Most Discectomies and Laminectomies can be performed using the 'micro' approach. That is, with the use of an operating microscope. This allows for a much smaller incision. The incision is based on patient size, but typically is about ½ inch.



Most patients are able to go home the day of surgery. Some will require an overnight stay (especially if your surgery is performed in the afternoon). You will be scheduled for a follow up appointment 2 weeks following surgery. If this appointment is not already scheduled, please contact our office at 219-924-3300.

Your physician will discuss your exact condition and surgery in more detail.

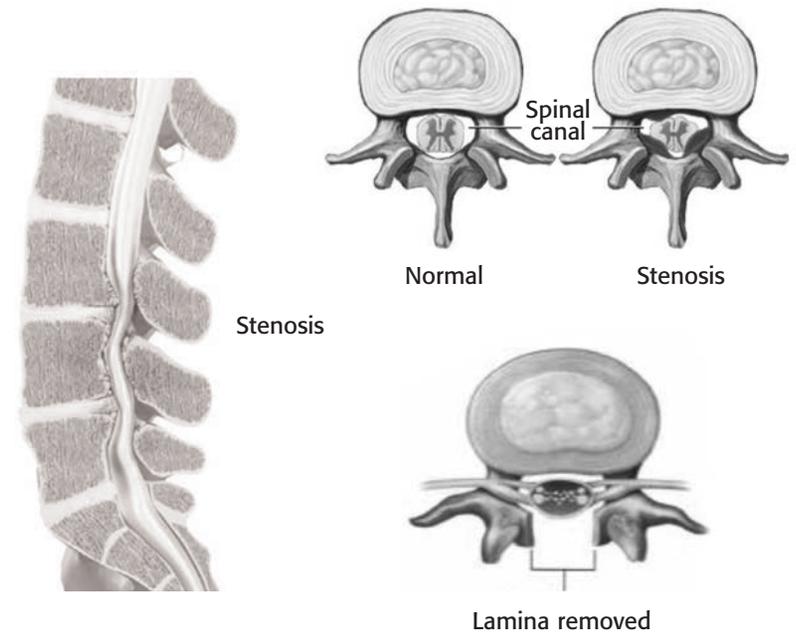
# LUMBAR DECOMPRESSION

As we have learned, the nerve roots exit the spinal cord and provide sensation and function to various areas of the body. The nerve roots which exit in the lumbar (lower) spine provide function and sensation to the lower part of the body. As we age, areas of the spine can become degenerated and narrow. This narrowing is called **Spinal Stenosis**. It can also be caused by a congenital condition (condition you are born with) or caused by instability or even a disc herniation. When Spinal Stenosis becomes significant or severe, compression on the nerve roots or even the spinal cord itself can occur. Depending on the amount of compression, it may cause pain, weakness, tingling or numbness. These symptoms can travel down the leg.

If conservative (non-surgical) measures fail, you may require a **Lumbar Decompression**. One way to achieve this is to perform a **Laminectomy**. A **Laminectomy** removes the Lamina bone. It also can involve the removal of the pedicle bone and some soft tissue. This allows more room for the nerve roots to exit the Spinal Canal or for the spinal cord itself.

The incision is based on patient size, but typically is only about ½ inch.

Most patients are able to go home the day of surgery. Some will require an overnight stay (especially if your surgery is performed in the afternoon). You will be scheduled for a follow up appointment 2 weeks following surgery. If this appointment is not already scheduled, please contact our office at 219-924-3300. You will be scheduled for a follow up appt 2 weeks following surgery.



You can generally expect a complete and full recovery within approximately 4 months. This does not mean that you will not be able to return to work and other regular activities sooner. Typically you are able to return to work in 3-6 weeks.

Your physician will discuss your exact condition and surgery in more detail.