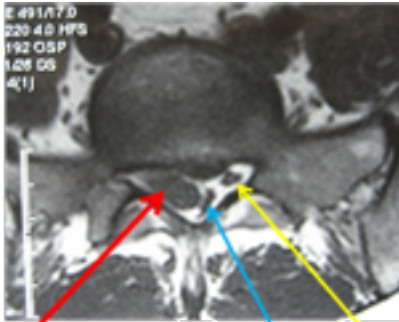


## What is a disc herniation (herniated discs)?

A disc herniation occurs when a full thickness tear in the outer part of the disc (tear in the dough of the jelly donut) allows the inner portion of the disc (the jelly inside the donut) to leak out of the tear. Because the nerve root lies right next to the intervertebral disc, it gets compressed by the leaked nucleus pulposus (leaked jelly from the donut). This compression of the nerve root can lead to pain, numbness, tingling, burning or the sensation of “pins and needles” that run down the arm or leg. It can also cause weakness in the arm or leg muscles and rarely may lead to loss of bowel or bladder control.





**Large Disc Herniation**

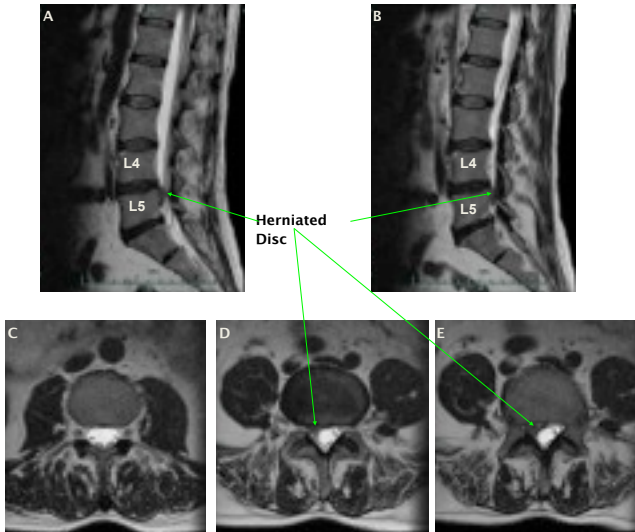
Disc lesion is  
COMPRESSING this  
nerve root & causes  
pain burning down the  
patient's leg

Normal nerve  
WITHOUT  
compression

MRI of the lumbar spine demonstrating a disc herniation on the right side. This particular patient had severe pain, numbness, tingling and weakness in the right leg.



MRI of the neck demonstrating a LARGE disc herniation causing severe spinal cord compression. In a case like this, non-operative treatment is NOT amenable to relieving the pressure on the spinal cord and surgery is recommended as a first line of treatment.



**Figure.** MRI of the lumbar spine demonstrating a disc herniation at L4-5 on the patient's right side (arrows are pointing at the herniated disc in A, B, D and E). The picture marked C shows a normal part of the spine where there is no herniation.

## TREATMENT OPTIONS

Disc herniations can be treated nonoperatively or may require surgery. Most disc herniations can generally be treated non-operatively if the symptoms associated with it (ie pain, numbness, tingling, burning sensation, etc) are mild and tolerable. The only time that surgery is recommended as a *first line* of treatment is if there is:

1. intractable pain
2. muscle weakness
3. spinal cord compression
4. loss of bowel &/or bladder function

Non-operative treatment options include:

1. Anti-inflammatory medications (Ibuprofen, naprosyn, steroids, etc.)
2. Physical therapy
3. Epidural injections

\*In many cases, chiropractic care and acupuncture can be very effective for short term pain relief. I support these modalities for selected conditions.

Depending on the size of disc herniation and amount of nerve root compression, the pain may last from a few weeks to several months. It is often difficult to judge the duration and severity of symptoms.