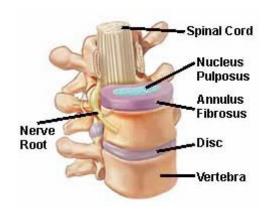
# **Herniated Disc**

### What is a Disc?

In between each vertebra of the lumbar spine is a disc that provides shock absorption. In the center of the disc is the nucleus (nucleus pulposus) which is a soft gel like substance made up 80% of water. The outer wall of the disc is made of fibrous tissue (annulus fibrosus). The nerve roots exit on each side of the spinal canal through small foramens (holes) in between the disc and the vertebra



## **What Causes a Herniated Disc?**

A disc can become herniated in numerous

ways. The outer fibers of the disc, called the annulus fibrosus, hold the inner portion of the disc together. If there is a large stress to this outer layer, for example lifting a heavy object while twisting, it will tear and no longer be able to hold the inner gel-like nucleus in. As a result the bulge of the nucleus, or herniation, can lead to several problems. The bulge can compress the nerve roots, interfere with the spinal canal, and cause pain itself. Finally, as we age the disc loses its elasticity and height. As the annulus fibrosus degenerates it becomes weaker and easier to tear.

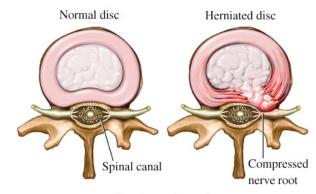
### What are the symptoms?

# Normal Disc Degenerated Disc Bulging Disc Herniated Disc Thinning Disc Disc Degeneration with Osteophyte Formation

If the herniation compresses the nerve root of the foramina, it can be common to experience referred pain symptoms into the lower extremity. This pain into the lower extremity usually occurs only on one side. In addition, if there is a tear in the outer fibers, there can be pain associated with this tear, often referred to as discogenic pain. Disocgneic pain is usually local to the tear, not referred into the lower extremity. Symptoms may be described as burning, stabbing, tingling, or numbness. If not treated, advanced cases may lead to muscular weakness and diminished reflexes

Treatment for this condition should

always begin by seeing your physician or an orthopedic



Top views of vertebrae

specialist. This injury can become complex in nature if the underlying issue is not addressed. If you experience muscle weakness, or abnormal sensation into the lower extremities, please contact a specialist immediately. The majority of patients with a herniated disc are non-operative and are usually referred to physical therapy for treatment. In therapy, you will be evaluated as an individual to customize a plan of care to treat the deficits noted. Some treatments may consist of manual traction, joint mobilizations, soft tissue mobilizations, therapeutic exercises, postural education, activity modification instruction, and a comprehensive home exercise program. The goal of physical therapy is to attempt to alleviate symptoms, increase functional activity, educate the patient, and prevent future back pathology. In some cases your physician may utilize cortisone, via an epidural injection, to assist with inflammation control and pain relief, in order to tolerate physical therapy intervention

If you would like more information about this issue, or need a physician referral in your area, please call us at 310-860-9720.