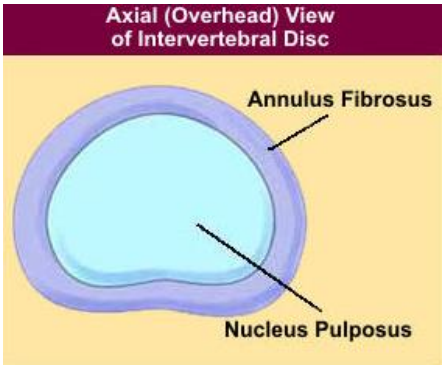
Herniated Disc

What is a herniated disc?

In order to understand a herniated disc, it is important to understand the intervertebral disc itself. There is a spinal disc at every spinal level between the bony vertebrae. The disc acts as an excellent shock absorber, absorbing stresses by displacing water and then reabsorbing water to get back to the original height.



The disc is analogous to a jelly donut with the inner part being the nucleus.

The normal disc is composed of 80% water along with 20% proteins and collagen. The inner part of the disc is analogous to the jelly in a jelly doughnut and it's called the nucleus pulposus.

The outer part of the disc is analogous to the outer part of the donut and is called the annulus fibrosis. In this area, there are nerve endings that can feel pain. The inner part of the disc has no nerve endings and does not cause pain.

How Does a Disc Herniation Occur?

As an individual ages, hydration in the disc is slowly lost. The 80% water starts to diminish, and the disk may end up slowly creating tears in the outer part.

This is also referred to as a slipped disc, lumbar disc herniation, cervical disc herniation, prolapsed disc, disc herniation and more.

Approximately one in eight Americans will end up with a herniated disc at some point. Only about 1% of Americans are symptomatic at any one point in time

What are the symptoms of a disc herniation?

When a disc herniates, it may not be painful at all. If the piece of herniated disc irritates some nerve endings in the outer part of the disc, it may cause significant back pain. It is only when the disk actually presses on an adjacent nerve root that it may cause significant pain down the correlating arm or leg.

When a disc herniation creates nerve root compression, it may spark up an intense inflammation reaction. This is what leads to sciatica down a person's leg or radiculopathy pain down a person's arm. The symptoms may feel like an electrical jolt or a burning sensation, numbness or pins and needles, and back pain may or may not be present or neck pain if it's a cervical disc herniation.

Motor weakness sometimes occurs, and it will depend on which nerve root is being pinched. If the L5 nerve root is being pinched, it may cause weakness lifting up the foot. If the C-5 nerve root is being pinched in the neck, it may cause weakness in the biceps for instance.

What is the treatment for a symptomatic herniated disc?

Without symptoms, treatment is unnecessary. When a person has significant pain, numbness or motor weakness from the herniation, then initial treatment should consist of over-the-counter anti-inflammatories and Tylenol. This may help with mild to moderate pain and are very low risk. They should always be taken according to the manufacturer's dosing recommendations.

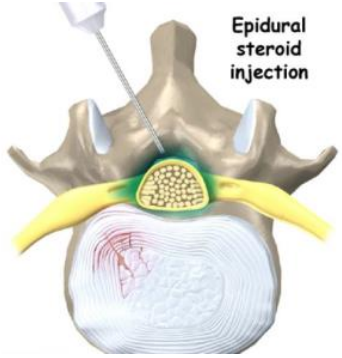
Short-term narcotics and muscle relaxers may be useful to help with the pain. For one thing, studies have shown that bed rest more than 24 to 48 hours actually does more harm than benefit. Muscle relaxers and short-term opiates may allow patients to start getting up and being more active.

A Medrol Dose Pak is a hefty oral dose of an anti-inflammatory, Prednisone, that tapers off over five days. It should only be prescribed once and should not be taken in conjunction with additional anti-inflammatory medications, as it can cause an ulcer.

Physical therapy and chiropractic treatment are often beneficial, relieving nerve compression along with decreasing spasms. Treatments may involve ultrasound, electrical stimulation, stretching and strengthening, spinal manipulations and a TENS unit for home use. A TENS unit may alter the way that the brain perceives signals and make the pain less intense.

Spinal decompression therapy is a treatment that became FDA cleared back in the late 1990s. It is noninvasive, very effective and cost less than 5% of spine surgery. Typically a series of treatments are necessary over a span of about seven weeks. Research has shown the treatments to be over 85% effective for disc related pain.

The gold standard for interventional pain management with a symptomatic herniated disc is epidural steroid injections. These injections involve administering cortisone medication around the area of the pinched nerve to soothe the area with soothing anti-inflammatory medicine.



Often times a series of three injections are necessary performed over six weeks. The objective with this treatment and with all treatments for a symptomatic herniated disc is to relieve the symptoms while the body will hopefully disintegrate the piece of disk that has herniated.

Epidural injections may be repeated every few months as a series. There are three different methods of performing the injections, and your pain doctor will decide the best option for you.

How effective are the treatments for disc herniation?

The good news is that over 95% of those with a symptomatic disc herniation will be able to avoid surgery. In addition, a landmark study in the Journal of the American Medical Association show that if surgery can be avoided, the outcomes are no different from those who had surgery at the one year point.

It may take more than one treatment method to achieve pain relief. For instance, along with the epidural steroid injections, spinal decompression therapy may provide optimal pain reduction. By themselves, epidural steroid injections have been shown to provide 75 to 90% good to excellent outcomes for sciatica and radiculopathy pain relief.

If a person has consistent pain that fails conservative treatment for six to eight weeks, surgery becomes an option. Also, if a person develops progressive neurologic deficit like a foot drop, then surgery should be considered. There is a rare condition called cauda equina syndrome, and if an individual develops bowel and bladder symptoms surgery should be performed emergently.

Disc herniations are very common and most often able to be treated conservatively with effective pain management.