

## **What is a herniated disc?**

Many patients with back pain, leg pain, or weakness of the lower extremity muscles are diagnosed with a herniated disc. When a disc herniation occurs, the cushion that sits between the spinal vertebra is pushed outside its normal position. A herniated disc would not be a problem if it weren't for the spinal nerves that are very close to the edge of these spinal discs.

## **What is the spinal disc?**

The spinal disc is a soft cushion that sits between each vertebrae of the spine. This spinal disc becomes more rigid with age. In a young individual, the disc is soft and elastic, but like so many other structures in the body, the disc gradually loses its elasticity and is more vulnerable to injury. In fact, even in individuals as young as 30, MRIs show evidence of disc deterioration in about 30% of people.

## **What happens with a 'herniated disc'?**

There are several causes for disc herniations. The most common is related to degenerative changes associated with chronic subluxations (misalignment of the vertebrae). When vertebrae are left out of place not only can it cause pain, but the misalignment causes degenerative changes. As the spinal disc becomes less elastic, it can rupture. When the disc ruptures, a portion of the spinal disc pushes outside its normal boundary--this is called a herniated disc. When a herniated disc bulges out from between the vertebrae, the spinal nerves and spinal cord can become pinched.

## **What causes symptoms of a herniated disc?**

When the herniated disc ruptures and pushes out, the nerves may become pinched. A herniated disc may occur suddenly in an event such as a fall or an accident, or may occur gradually due to subluxations that have been left uncorrected resulting in repetitive trauma of the spine. Often people who experience a herniated disc already have misalignment of their vertebrae or spinal stenosis, a problem that causes narrowing of the space around the spinal cord and spinal nerves. When a herniated disc occurs, the space for the nerves is further diminished, and irritation of the nerve results. This makes any misalignment of the vertebrae, much more critical.

## **What are the symptoms of a herniated disc?**

When the spinal cord or spinal nerves become compressed, they don't work properly. This means that abnormal signals may get passed from the compressed nerves, or signals may not get passed at all. Common symptoms of a herniated disc include:

- Electric Shock Pain Pressure on the nerve can cause abnormal sensations, commonly experienced as electric shock pains. When the compression occurs in the cervical (neck) region, the shocks go down your arms, when the compression is in the lumbar (low back) region, the shocks go down your legs.

- Tingling & Numbness

Patients often have abnormal sensations such as tingling, numbness, or pins and needles. These symptoms may be experienced in the same region as painful electric shock sensations.

- Muscle Weakness

Because of the nerve irritation, signals from the brain may be interrupted causing muscle weakness. Nerve irritation can also be tested by examining reflexes.

- Bowel or Bladder Problems

These symptoms are important because it may be a sign of cauda equina syndrome, a possible condition resulting from a herniated disc. This is a medical emergency, and you should see your doctor immediately if you have problems urinating, having bowel movements, or if you have numbness around your genitals.

All of these symptoms are due to the irritation of the nerve from the herniated disc. By interfering

with the pathway by which signals are sent from your brain out to your extremities and back to the brain, all of these symptoms can be caused by a herniated disc pressing against the nerves.

### **How is the diagnosis of a herniated disc made?**

At Barton Chiropractic in Concord the diagnosis of a herniated disc is made by physical examination. By testing sensation, muscle strength, and reflexes, your Chiropractor can often establish the diagnosis of a herniated disc.

An MRI is commonly used to aid in making the diagnosis of a herniated disc. It is very important that patients understand that the MRI is only useful when used in conjunction with examination findings. Patients in their 20s may begin to have signs of disc wear, and this type of wear would be expected on MRIs of patients in their 40s and 50s. This is due to the fact that most people have chronic conditions that have been left unchecked for years. Low back pain that has “gone away by itself.” Symptoms come and go, but problems do not correct themselves.

Making the diagnosis of a herniated disc, and coming up with a treatment plan depends on the symptoms experienced by the patient, the physical examination findings, and the x-ray and MRI results. Only once this information is put together can a reasonable treatment plan be considered.

Treatment of a herniated disc depends on a number of factors including:

- Symptoms experienced by the patient
- Age of the patient
- Activity level of the patient
- Presence of worsening symptoms

Most often, treatments of a herniated disc begin conservatively, and become more aggressive if the symptoms persist. After diagnosing a herniated disc, treatment usually begins with:

- Osteopathic treatment
- This is the only way to correct the underlying cause of the herniation which is the misalignment of the vertebrae with localised musculare tightness.

#### · Rest & Activity Modification

The first treatment is to rest and avoid activities that aggravate your symptoms. It is important to avoid activities that aggravate your symptoms.

#### · Ice & Heat Applications

Ice application can be extremely helpful in relieving the painful symptoms of a disc herniation. By helping to relax the muscles of the back, ice and heat applications can relieve muscle spasm and provide significant pain relief.

#### · Physical Therapy

Physical therapy and lumbar stabilization exercises do not directly affect the recovery of the herniated disc, but they can stabilize the lumbar spine muscles. This has an effect of decreasing the load experienced by the disc and vertebrae. Stronger, well balanced muscles help control the lumbar spine and minimize the risk or injury to the nerves and the disc, however recent research has shown that more often than not, patients will increase the severity of their condition by exercising due to the fact that the vertebrae are misaligned. The safest exercise for a herniated disc is walking and nothing else unless you are under the supervision of a personal trainer.

#### · Anti-Inflammatory Drugs

Nonsteroidal anti-inflammatory drugs (NSAIDs) are commonly prescribed, and often help relieve the pain associated with a disc herniation. By reducing inflammation, these drugs can relieve some pressure on the compressed nerves. NSAIDs should be used only under your doctor's supervision and as a last resort.

· Epidural Steroid Injections

Injections of cortisone can be administered directly in the area of nerve compression. Like oral anti-inflammatory drugs, the idea is to relieve the compression on the nerves. When the injection is used, the drug is delivered to the area of the disc herniation, rather than being taken orally and travelling throughout your body.

Is back surgery necessary in the treatment of a disc herniation?

Not usually. Osteopathic care has been shown to have amazing results with disc herniations.