

Disc Pain

WHAT IS A DISC?

Your spine is made up of interlocking stacks of bone called vertebrae. Between each pair of vertebrae is a disc, which cushions the bones so they will not grind together. Like any cushion, the disc has a soft interior and a firm covering. The soft interior is a jelly-like pad called the nucleus.

Each disc absorbs shock as you move, by compressing and deforming, much like the shock absorbers on a car. Discs allow your vertebrae to rock back and forth, giving you the flexibility to bend and move.

As we age, the water content in the disc progressively diminishes. As the disc dries out, it loses its ability to absorb shocks. This causes the shocks to be transmitted to ligaments and surrounding tissues which then may be injured. Dehydrated discs do not generally become herniated.

WHAT IS A HERNIATED DISC?

During heavy lifting, bending, or twisting, the tough outer ring of the disc is subject to great stress as it fights to hold the soft jelly-like pad within it. If the stress is greater than the strength of the outer ring, a tear results. A disc bulge occurs when a small tear allows the nucleus to bulge into the outer ring.

Larger tears allow the jelly-like pad to escape, resulting in a condition called a herniated or protruded disc. A herniated disc is also known as a "slipped" disc. Both a disc bulge and a herniated disc may cause severe pain. If sensitive nerves near the disc are compressed or inflated, pain may also be felt in the buttocks, hip or leg.

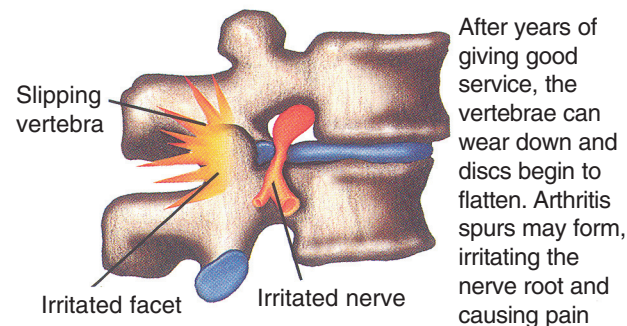
HOW IS A DISC PROBLEM DIAGNOSED?

It is important to diagnose the specific problems in your back so that precise treatment can be prescribed. To do this, your doctor may order special tests to help determine to what extent the disc is causing your pain and the exact location of the problem disc.

X-rays show the general condition of your vertebra and are helpful in determining the cause of pain. Although x-rays cannot reveal a ruptured disc, for instance, they may reveal a narrowed disc space, which can be an indication of trouble in that area of the spine.

Magnetic Resonance Imaging (MRI) and Computerized Tomography (CT) scans produce detailed computer images of soft tissue and bones and are used to reveal the relationship between nerves and the bony structure of the spine. MRIs are especially beneficial for the study of soft tissue abnormalities such as disc degeneration, protrusion or rupture.

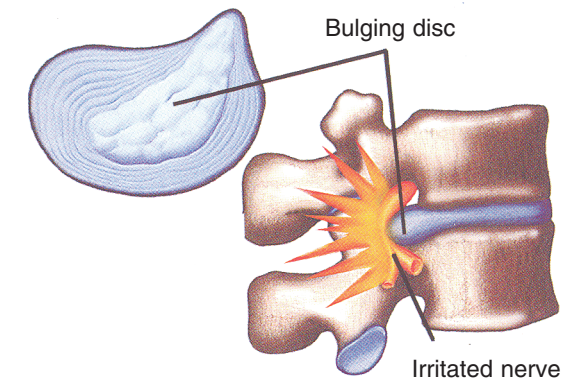
After years of working well, the vertebrae can wear down and discs begin to flatten. Arthritis spurs may form, irritating the nerve root and causing pain.



CT scans give a cross-section view of the spine and can show a bulging or ruptured disc.

Electromyograms (EMG) and nerve conduction studies measure the electrical activity of your muscles' contractions. They detect nerve or muscle irritation. Information from these tests help to locate the specific vertebrae and spinal nerves involved, allowing a diagnosis and an appropriate treatment program.

Bone scans can reveal abnormal bone activity.



Wear and tear on your back can cause discs to flatten and bulge out, pinching nerves and causing pain.

WHAT CAN BE DONE FOR PAIN?

In many cases, conservative care can be effective. Your doctor may initially prescribe medications to ease pain and inflammation. An Epidural Steroid Injection (ESI) may be helpful for disc problems.

WHAT IS AN EPIDURAL STEROID INJECTION (ESI)?

ESI is a procedure in which a cortisone-like drug is placed into the space around spinal nerves. These cortisone compounds are potent anti-inflammatory agents that deliver medication directly to the inflamed area.

While the effects of the injection tend to be temporary (one week to one year) an ESI can be beneficial in providing relief for patients during an episode of severe back pain and allows patients to progress in rehabilitation.

A local anesthetic is used to numb the area and there should be relatively little discomfort. An ESI is performed by your doctor in about the same time it takes for a routine office visit.

WHAT ELSE CAN BE DONE?

Physical therapy is important to help decrease pain and prevent a recurrence. A detailed physical therapy program will be developed to treat your condition. Your doctor may use deep heat, electrical stimulation, aquatic therapy and exercise equipment as part of your rehabilitation.

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