



Vertebral Disc Injury

Between each vertebrae (bone) in the spine there is a disc of cartilage. Each disc has an outer portion, the annulus fibrosus, and an inner gel-like portion, the nucleus pulposus. The annulus fibrosus serves to contain the nucleus pulposus. A comparison can be made with a jelly doughnut - the inner jelly portion being held in by the dough.

There are four general types of disc injury: protrusion, prolapse, extrusion, sequestration- with the degree of damage from least to most severe. In our doughnut analogy the jelly is contained in the first two, but has begun to leak in the more severe injuries- these would be considered disc herniations.

When a disc is herniated it may put pressure on the nerve root exiting the spinal cord in that area. When this happens the areas which the nerve innervates, the skin and muscles, are affected. Although the injury itself is in your spine, pain and other symptoms (pins and needles, numbness, etc) may be felt in your back, buttocks or into your legs or arms, depending on which nerves are involved.

Treatment incorporates the use of modalities to decrease pain and inflammation, such as interferential current and acupuncture. Exercises will be prescribed to decrease irritation to the area, and later to strengthen the muscles surrounding it. Other techniques such as traction may be used to relieve the pressure on the nerves.

The therapeutic modalities commonly used include:

Ultrasound: uses sound waves and may be used to decrease scar tissue, increase blood flow, or decrease pain.

Interferential Current: uses electrical current to decrease pain, can also be used to elicit muscle contraction and decrease swelling.

Acupuncture: uses small, solid needles to encourage healing, reduce pain, and improve function of affected areas of the body.

What can you do at home?

Rest: by decreasing your activity you allow your body a chance to heal itself. When you start to feel better it is important to ease back into activities which might be aggravating. Listen to your body - pain means that you have done too much.

Ice: ice decreases the metabolism of your cells so that they do not die despite a decrease in oxygen to the injured area. Ice should be kept on for approximately 15 minutes, several times a day. The injured area should be elevated (above the level of your heart) at the same time. Use a wet towel between the ice and your skin to protect against frostbite. You can use frozen veggies, cold packs, or real ice.