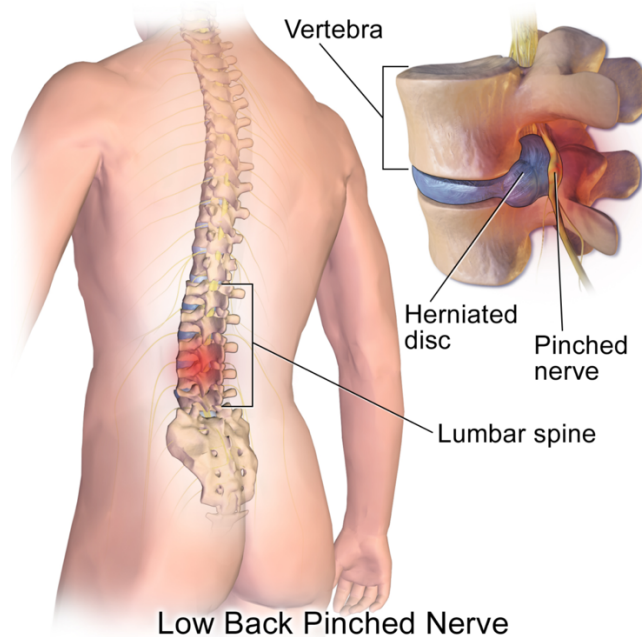


Lumbar Disc Herniation

Herniated disc is a relatively common condition that can occur anywhere along the spine, but most often affects the lower back or neck region. Also known as a "slipped disc" or "ruptured disc", a herniated disc develops when one of the cushion-like pads between the vertebrae moves out of position and presses on adjacent nerves.



Herniated discs are typically caused by overuse injuries or trauma to the spine; however, disc conditions can also develop as a result of the normal aging process. In most cases, a herniated disc in the lower back will heal within six months, as the size of herniation shrinks with time via *resorption*. This means that the disc fragments are absorbed by the body. Most people suffering from herniated disc respond well to conservative treatment and do not require surgery. Surgery may be needed if medication, physical therapy and other non-operative treatments fail.

What is a disc?

Spinal discs are cushion-like pads located between the vertebrae. Without these "shock absorbers," the bones in the spine would grind against one another. In addition to giving the spine flexibility and making movements such as twisting and bending possible, discs protect the spine by absorbing the impact of trauma and body weight. There are fibers on the outside of each disc that attach to adjacent vertebrae and hold the disc in place. A herniated disc occurs when the outer layer tears or ruptures and the gel-like center leaks into the spinal canal.

The spinal canal has just enough space to house the spinal cord and spinal fluid. When a disc herniates and spills into the spinal canal, it can cause compression of the nerves or spinal cord. Intense, debilitating pain and alterations in sensation often occur. In

addition, the gel-like substance inside the disc releases chemical irritants that contribute to nerve inflammation and pain.

What causes a herniated disc?

As we age, the spinal discs gradually lose fluid volume. This process starts at about age 30 and progresses slowly, over time. As the discs dry out, microscopic cracks or tears can form on the outer surface, causing it to become brittle, weak and more susceptible to injury. The most common causes of herniated disc are:

- Wear and tear: Discs dry out and aren't as flexible as they once were.
- Repetitive movements: Work, lifestyle, and certain sports activities that put stress on the spine, especially the lower back, further weaken an already vulnerable area.
- Lifting the wrong way: Never lift while bent at the waist. Proper lifting entails lifting with your legs and a straight back.
- Injury: High-impact trauma can cause the disc to bulge, tear or rupture.
- Obesity: Carrying excess weight puts an undue amount of strain on the spine.
- Genetics: There are some genes that are more commonly present in individuals with disc degeneration. More research is needed to investigate the role of these genes—they could be targets of biological treatment in the future.

What are the symptoms of a herniated disc?

Pain from a herniated disc can vary, depending on the location and severity of the injury. It is typically felt on one side of the body.

If the injury is minimal, little or no pain may be felt. If the disc ruptures, pain can be severe and unrelenting. Pain may radiate to an extremity in a specific nerve root distribution if significant nerve impingement has occurred. For example, sciatica is frequently caused by a herniated disc in the lower back. Herniated disc can manifest itself with a range of symptoms, including:

- Dull ache to severe pain
- Numbness, tingling, burning
- Muscle weakness; spasm; altered reflexes
- Loss of bowel or bladder control (Note: These symptoms constitute a medical emergency. If they occur, seek medical attention immediately).

Read more about disc herniation at www.spineuniverse.com