

GETTING TO THE BOTTOM OF SPINAL NERVE ROOT COMPRESSION INJURIES

Accidents or age-related wear and tear (degeneration) can cause painful ruptured or herniated discs in the neck or back. Doctors should check people with herniated discs for signs of spinal nerve root compression, a more serious condition that happens when the discs press against nerve endings. If it's not treated, spinal nerve root compression can lead to paralysis or a loss of movement.

Causes of Nerve Root Compression

The discs along our spines are made of a tough, fibrous membrane on the outside (the annulus fibrosis) with a jelly-like core (the nucleus pulposus). When the nucleus pushes through the outer ring of the annulus, the disc bulges, or herniates. These herniated discs can also pinch nearby nerves. The nerves send messages from the brain to the spinal cord, controlling our abilities to move and to feel. Symptoms of spinal nerve root compression can include:

- neck and/or back pain
- pain, tingling, or loss of feeling or function in the fingers, arms, legs, or feet
- loss or weakness of reflexes
- muscle spasms and weakness

Mild nerve root compression may not need surgery and can be treated with medications, injections, physical therapy, or chiropractic care. Major compression can cause weakness in the arms or legs and require surgery to prevent nerve death and loss of function. For example, the pressure from herniated discs on nerves in the neck can lead to a loss of arm movement.

Severe disc ruptures in the lower back can affect several nerve roots that control the legs, feet, bowels, and bladder, and lead to cauda equina syndrome (CES). "Cauda equina" is Latin for "horse's tail." People with CES feel pain in both legs, extreme weakness, and a loss of sensation and mobility, including bowel and bladder function.

Getting the Right Diagnosis

Herniated disc sufferers often go to emergency rooms because the pain is usually sudden and intense. Medical providers often fail to notice the dangers of spinal nerve root compression or to diagnose and treat it properly. A doctor should do a thorough history and examine a person's senses, muscle strength, and reflexes.

If you have spinal nerve root compression, your doctor should also ask where you feel your symptoms, and if you experience any bowel or bladder changes (retention or incontinence). Your doctor can include tests for CES, "saddle anesthesia" (loss of genital/rectal sensation), and rectal muscle movement. Patients with these severe symptoms should have Magnetic Resonance Imaging (MRI) for detailed pictures of their injuries, which is the best way to confirm spinal nerve root compression.

Proper Treatment

Serious herniated disc compression must be corrected surgically – the sooner, the better. The length and severity of symptoms at the time of surgery are good ways to predict recovery. If the condition is critical and left untreated for days or weeks, the chances of a full recovery are limited. But, if the compression is corrected quickly, before major weakness occurs, the injured person can function at or near normal levels.

When surgery is done within 36 hours of the onset of urine retention, patients have a much better chance of being able to empty their bladders. If surgery is done later, they could lose control of their bladders and face a lifetime of catheter use to relieve themselves.

Despite potential problems, when it's diagnosed early and correctly, sufferers of spinal nerve root compression or pinched nerves can recover to live full and active lives.