

# What is Spinal Stenosis?

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## What Is Spinal Stenosis?

Spinal stenosis is one of a number of causes of back pain. It is defined as narrowing of the spinal canal. This narrowing can lead to compression of the spinal cord and nerve roots as they exit the spinal canal. Spinal stenosis commonly occurs in the neck or lower back.

Symptoms of stenosis vary depending on the location of the narrowing. Upper spine symptoms include pain, numbness, tingling, weakness, loss of fine motor control in the arms. In addition, an abnormal way of walking and loss of balance may be present. Lower back spinal stenosis affects the legs. This is often associated with low back and leg pain along with difficulty walking for more than a few minutes. Certain positions, such as leaning over a shopping cart, may temporarily relieve pain and allow patients to walk longer distances

by creating more room in the spinal canal.

The causes of spinal stenosis are divided into two categories, hereditary and acquired. Hereditary spinal stenosis refers to a small spinal canal even before birth and symptoms emerge at a young age. Acquired stenosis is associated with aging and arthritis. The aging process causes the ligament that covers the spinal cord to become thicker and compress the cord or nerve roots. The disks between the bones may wear out and change shape and eventually narrow the spinal canal. The facet joints, two joints at every level of the spinal column, may form spurs and cysts. The bone spurs and facet cysts can compress the spinal cord or a nerve roots (Figure 1&2).

The diagnosis of spinal stenosis begins with the history and the physical examination. Imaging studies such as an MRI, a CT scan, and a myelogram (imaging after a dye is injected in the spine) are important as they can show the location of the narrowing. The MRI is most helpful for soft tissue detail and the CT is most helpful in evaluating bone.

The treatment plan depends on the severity of the stenosis. Postural change may allow the person to find some relief by making more room for the cord and nerve roots. Anti-inflammatory medication may relieve some of the pain and reduce the inflammation associated with the arthritic changes. Changing the level of activity and choosing exercises such as cycling will allow a person to exercise

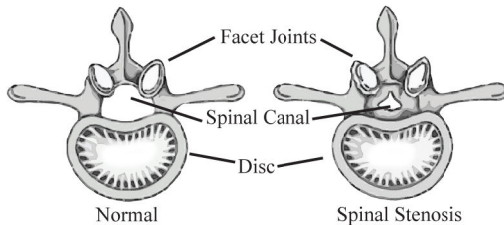


Figure 1. The wear-and-tear effects of aging on the spine lead to narrowing of the spinal canal and causes lumbar spinal stenosis.



Figure 2. Sagittal view of spinal stenosis

longer because spinal stenosis decreases a person's stamina. Weight loss will decrease the load that the spine bears. Epidural steroid injections can be used to shrink the nerve roots and provide temporary relief. If the stenosis is severe and/or the person gets no relief from the above treatments then surgery may be indicated. New advances in spine surgery such the X-STOP are a less invasive solution to surgical decompression which aims to remove the cause of the narrowing.

Spinal stenosis is a treatable disease that can be disabling if left unchecked.



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Dr. Guirgues will be speaking on Latest Treatments for Back Pain and Osteoarthritis, Tuesday May 13th at 6PM at the Carteret County Civic Center.

Dr. Guirgues is an Orthopedic Surgeon who completed a fellowship in Spine Surgery. He is Board Certified by the American Board of Orthopaedic Surgery and he is a Fellow of American Academy of Orthopaedic Surgeons. His practice is at Carteret Surgical Associates and he performs surgery at Carteret General Hospital.