



Walk Without Pain

Good News For Those Who Suffer From Chronic Back and Leg Pain

Jeffrey S. Tharp, DO
Orthopaedic Spine Surgeon

Trouble walking? Maybe it's your back. People who experience pain in the low back and legs and are over 55 years of age can be sufferers of the most common ailment: spinal stenosis. Medical advancement in technology over the last few years has allowed doctors to make the diagnosis and consistently treat spinal stenosis.

Stenosis means narrowing. In a patient with spinal stenosis, a narrowing of the spinal canal has taken place. The spinal canal is the tunnel in the center of the spine that holds the spinal cord and nerves. Narrowing of the canal causes pinching of the delicate nerves that travel down into the legs. Pinching may occur in more than one place.

Spinal stenosis is almost always due to changes that come from aging. Thickening of ligaments and bone spurs growing into the spinal canal are among the age-related causes.

Low back pain with leg pain is the main symptom of spinal stenosis. The pain may be perceived as numbness, tingling and weakness that radiates into the buttocks and legs. The pain usually comes on when standing or walking and is lessened by sitting. Physical activity makes the pain worse, so it may become impossible to walk even short distances. Although walking causes pain for most people with spinal stenosis, symptoms sometimes are reported as hot, cold, burning, heavy and/or a tired sensation.

Often, walking while bent forward or lying in a fetal position relieves the pain. An example of this is leaning over a grocery cart and being able to walk a longer distance with less pain. Symptoms are usually slowly progressive in which patients find themselves walking less and less, stopping them from doing activities they used to enjoy.

The diagnosis of spinal stenosis is made by a careful medical history and physical exam. The patient usually has no history of back problems or recent injury. This can make the diagnosis of spinal stenosis somewhat more difficult. Special imaging studies other than X-rays, such as a myelogram, a computed tomography (CT) or a magnetic resonance imaging (MRI) of the spine can detect spinal stenosis and show the points of nerve pressure.

When inflammation in addition to compression of the nerves is causing part of the pain, treatments will start with arthritic medications called "non-steroidal anti-inflammatory medications," along with an exercise therapy program to stabilize the spine.

If the symptoms persist or worsen, an injection of steroids directly into the spinal canal may be necessary. These injections are epidural steroid injections, which decrease the inflammation in the nerves. By decreasing the inflammation, it lessens the pain that radiates through that nerve. All of these measures do not change the cause of the problem. If all non-operative treatments fail to relieve the pain, it is sometimes necessary to physically go and operatively unpinch the nerves.

If you have been told that you are too old or that you just need to live with the pain, a second opinion may be appropriate. New advancements in medical knowledge have allowed for the treatment of spinal stenosis to be highly successful.

The procedure to unpinch the nerves is called a posterior lumbar decompression. An incision is made in the middle of the lower back. Muscles supporting the spine are pushed aside temporarily and a 'window' is made into the spinal canal. The spinal nerve is retracted out of the way, and the bone spurs and thickened ligament are removed to 'free-up' the nerves.

A fusion occasionally needs to be performed during a lumbar decompression surgery. This is usually necessary due to instability. Instability can be a slipped vertebra (called Spodylolisthesis), curvature of the spine (called Scoliosis) or joints in the spine not working correctly. To correct the instability in the spine, bone is placed on either side of the spine which, when healed, immobilizes that level. The source of bone for a fusion can either be strips of bone removed from the back of the pelvis or bone bank donor material. Sometimes, additional stability is needed to hasten the healing of the fusion. Instrumentation such as metal screws and plates or rods may be inserted into the spine to hold the two vertebrae together while the fusion heals. The benefits of using instrumentation are that the fusion rate increases from 65% to 85-90%, and the patient does not need to wear a brace after the operation.

Hospitalization following surgery to correct spinal stenosis is approximately 3 – 6 days, with the patients out of bed and walking the first or second day after surgery. Physical therapy after surgery is necessary to rehabilitate the muscles and retrain the nerves to work. Patients are feeling better at approximately 4-6 weeks, while full recovery may take up to 12 weeks. The success rate is approximately 90% for decompression surgery in spinal stenosis. Success is defined as no or minimal leg pain with a return to normal age-related activities.

Occasionally, nerves are pinched so badly that a patient has more symptoms than just pain. Without treatment, the severely pinched nerves may stop working. This will result in weakness in the patient's legs and possibly loss of bowel and bladder function control. If left untreated, damage may be permanent. If any of these symptoms are present, surgery is necessary. Such symptoms can be the warning signs of early paralysis. Fortunately, in the hands of a skilled spine surgeon, these problems may be correctable.