

SPINAL STENOSIS

**A Common Arthritic Condition
Ashvin Patel M.D. FAAOS**

Spinal stenosis is a common syndrome that often afflicts the older population. It is most simply defined as progressive compression of nerves due to narrowing of the bony canal that surrounds these structures. There are several contributing factors that lead to this problem. The most common cause is degeneration due to lumbar spondylosis, or arthritis in the lower back. The narrowing of the spinal canal that occurs as the result of this degeneration causes mechanical compression of the spinal nerves in the lower parts of the back. These nerves are responsible for sensation and strength in the legs. In many individuals, this compression leads to no symptoms, while in others, a variety of clinical symptoms can occur. Interestingly, the severity of symptoms does not necessarily correlate with the magnitude of compression seen on spinal imaging studies.

Because spinal stenosis most commonly occurs as a result of the aging process, it is not surprising that the early symptoms are slow in onset. Spinal stenosis is a progressive and dynamic process. As a result, symptoms are not identical from individual to individual. Before our more universal awareness of the diagnosis of spinal stenosis, the bizarre or frequently atypical and varying symptoms and inconsistent signs (often with a lack of any neurological deficit), commonly prompted physicians to recommend psychiatric evaluation of these older patients. Now, however, the clinical manifestation of spinal stenosis is better understood and much more precise diagnosis and treatment is available.

Although low back pain is commonly associated with spinal stenosis, the most common reason the patient consults a physician is leg and buttock pain in one or both legs that is often made worse by standing and/or walking. The patient will typically describe symptoms in the leg such as pain, heaviness, soreness, cramping and weakness and may also report a feeling of tingling or numbness. The distribution of pain is usually in the buttock, back of the thigh, calf and top of the foot. Symptoms in the front of the thigh are less common, but may also occur.

The majority of patients with spinal stenosis describe a history of progressively decreased walking distance over a period of months. Their walking is limited by the pain, heaviness and cramping in the buttocks and legs. Often, they sit or bend forward to obtain relief after walking a short distance. They will also often lean forward when they walk because it lessens buttock and leg pain. That is because with flexion of the spine (leaning forward) there is a “enlargement of the spinal canal” and, thus, more space for the nerves. The classic revelation by the patient is to volunteer that their symptoms are less aggravating in the grocery store - unbeknownst to them, they are leaning on the grocery cart in a flexed position, which enlarges the spinal canal. Complaints of limited spine movement are common, particularly extension of the spine (leaning backward). Often, the extension leads to “jolts of lightening” down the buttocks and legs. This is because there is more compression of the nerves in the extended position. Treatment of this problem begins with obtaining the correct diagnosis. As mentioned, the symptoms are often vague and can be similar to symptoms of a hip problem or other musculoskeletal problems. Once a diagnosis of spinal stenosis is accurately established, patient education is extremely important. Patients should be reassured that their pain is not dangerous and is the result of degenerative changes in the spine.

Anti-inflammatory medications and controlled physical activity are the safest and most effective initial measures. A program of lumbar isometric flexion exercises followed by a gradual increase in activities should result in a return to more normal living. Patients who complain of persistent leg and back pain after six weeks of conservative treatment may require more aggressive intervention. This may be in the form of epidural steroid injection in the spinal canal to decrease inflammation in the involved nerves. A small percentage of patients may not respond to any of these treatments. In these cases, surgical intervention is recommended if the symptoms are severe enough to adversely affect quality of life. A special test such as magnetic resonance imaging (MRI) or a myelogram may be required to confirm the diagnosis and to prepare for the surgery. Fortunately, the success rate for spinal stenosis surgery is extremely high.

Please do not hesitate to contact our office with any questions regarding this or any other educational handout we have provided.