



**Center For
Spine, Sports &
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Excellence**

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LUMBAR SPINAL STENOSIS (LSS)

Fact Sheet

Overview	Lumbar spinal stenosis (LSS) is a degenerative, age-related narrowing of the lower spinal canal that causes pressure on the nerves, leading to pain and immobility. LSS is a common condition, with more than 1.2 million patients diagnosed and treated each year. ¹
Who Gets LSS?	LSS is suffered mainly by the middle-aged and elderly population. Onset generally occurs after age 50. The prevalence of LSS is likely to increase over the next decade, as it is estimated that the population of Americans over age 50 will grow by 18 million between 2009 and 2019. ²
Cause	LSS results from a narrowing in the lower (lumbar) spinal canal caused by the growth of bone or tissue. As this space in the lower spinal canal shrinks, increasing pressure is placed on the nerves that go through it to the legs. This pressure causes pain, numbness or weakness in the lower back, buttocks, legs and feet.
Symptoms and Effects	<p>The physical discomfort from LSS tends to worsen while walking or standing, and is relieved by bending forward, sitting or lying down. Patients commonly complain of difficulty walking even short distances, and do so with a characteristic stooped posture in more advanced cases.</p> <p>LSS patients are often limited in their ability to pursue normal daily activities, including work, social and recreational activities. A lack of activity due to immobility can lead to obesity and associated health problems as well as depression.</p>
Diagnosis	Most physicians diagnose LSS by taking a patient's history, asking questions about the symptoms, and viewing the results of imaging tests such as MRI (magnetic resonance imaging), computerized axial tomography (CAT scan) and X-ray.
Treatment Options	The treatment continuum for LSS includes conservative care such as physical therapy, acupuncture, exercise and chiropractic. In addition, symptom management may include the use of medications, epidural

steroid injections (ESIs), pain pumps and neuromodulation. However, these treatments do not remove the source of the pain, and, in most cases, symptoms return. In the past, these symptomatic patients were then referred for open surgical procedures such as laminotomy (partial removal of the lamina, a plate of bone in the vertebrae) or laminectomy (removal of the entire lamina and the ligaments that are attached to it), and/or fusion. Each of these has risk factors and results in changes to the natural anatomy and structural stability of the spine.

**Introducing a New
Treatment Option:
*mild***

Now there is a solution that safely removes a primary source of LSS earlier in the treatment continuum. It's called *mild*.*

A less invasive alternative to open or endoscopic surgery, *mild* is an image-guided, device-enabled procedure that safely and therapeutically reduces pain and improves mobility while maintaining the spine's structural stability.

mild provides relief for patients by addressing a primary cause of LSS. During the procedure, the physician uses *mild* devices to remove small portions of bone and the tissue causing the pressure on the nerves.

Performed through a 5.1 mm *mild* Portal (about the diameter of a pencil), *mild* requires only an adhesive bandage for closure. Many patients report immediate relief, and most go home the same day.

mild has been proven safe and effective in several clinical studies.^{3,4} Data have shown that *mild* patients experienced consistent, statistically significant improvement in pain and function as well as physical well-being following treatment.⁴ No major adverse events related to the devices or the procedure have been reported.^{3,4}

mild is a proprietary platform technology of Vertos Medical Inc.

* Cleared for lumbar decompression, Vertos *mild* is designed to treat lumbar spinal stenosis (LSS).

References:

¹ Derived from longitudinal CMS database.

² eMedicine from WebMD, "Spinal Stenosis," Author: John Nk Hsiang, MD, PhD, Director of Spine Surgery, Seattle Neuroscience Institute, Updated: Dec 13, 2007, <http://emedicine.medscape.com/article/247887-overview>.

³ Deer T., et al. New image-guided ultra-minimally invasive lumbar decompression method: the *mild* procedure. *Pain Physician* 2010; 13:35-41.

⁴ Caraway, D. MiDAS I (*mild* Decompression Alternative to open Surgery): 12-week follow-up of a prospective, multi-center clinical study. International Spine Intervention Society 18th Annual Scientific Meeting, July 2010.

Sources:

- Agency for Healthcare Quality and Research, "Treatment of Degenerative Lumbar Spinal Stenosis," <http://www.ahrq.gov/clinic/epcsums/stenosum.htm>.
- "Lumbar Spinal Stenosis: Topic Overview," WebMD: <http://www.webmd.com/back-pain/tc/lumbar-spinal-stenosis-topic-overview>.