joimax®
Endoscopic Spine Experts

SPINAL STENOSIS

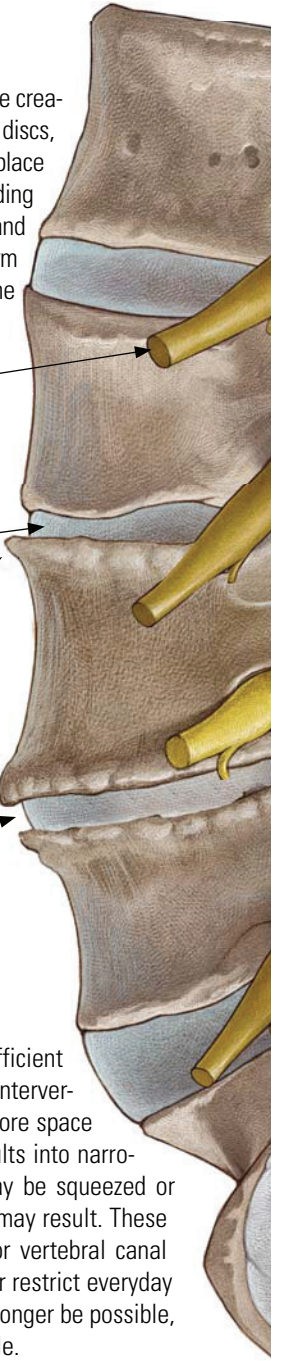
PATIENT INFORMATION

Get back in motion – fast and pain-free

Endoscopic, minimally-invasive treatment of your spinal canal stenosis – with the joimax® method

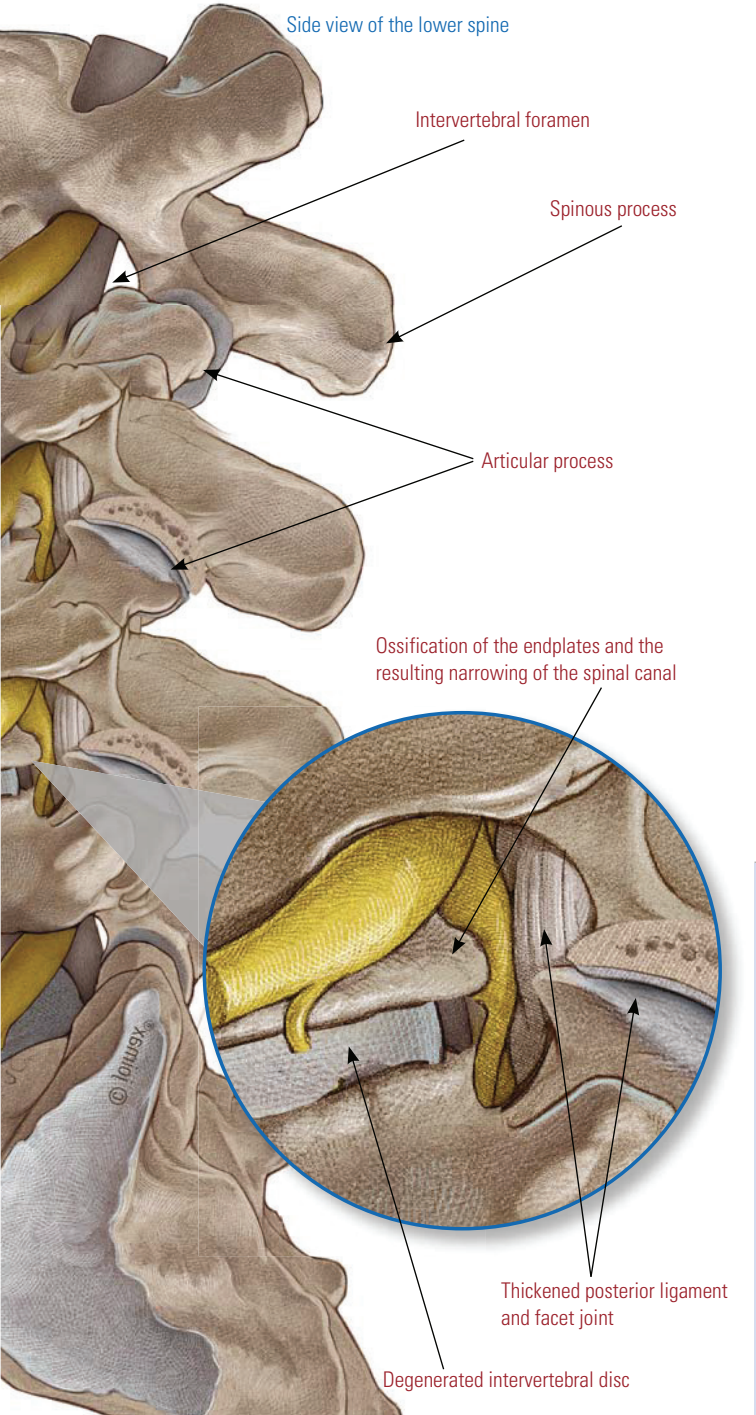
Dear Patient,

Our spine is a masterpiece of nature. The precise creation of bones, ligaments, tendons, intervertebral discs, muscles and nerves allows movement to take place in all directions while simultaneously providing „considerable" stability. The cervical, thoracic and lumbar vertebral bodies and the sacral bone form the spinal canal (vertebral canal) to protect the spinal cord and the exiting nerve roots.



Spinal stenosis – what is it?

Under normal circumstances, there is sufficient space for the nerves in the spinal canal. If intervertebral discs, vertebrae or ligaments require more space due to aging developing degeneration, it results into narrowing or stenosis. This means the nerves may be squeezed or even pinched and pain or a loss of sensation may result. These are the symptoms of spinal canal stenosis or vertebral canal stenosis. This may affect your quality of life or restrict everyday activities. For example, a trip to town may no longer be possible, since walking and standing become unbearable.


Side view of the lower spine
Intervertebral foramen
Spinous process
Articular process
Ossification of the endplates and the resulting narrowing of the spinal canal
Thickened posterior ligament and facet joint
Degenerated intervertebral disc
© joimax®

SPINAL STENOSIS

What are the causes of spinal stenosis?

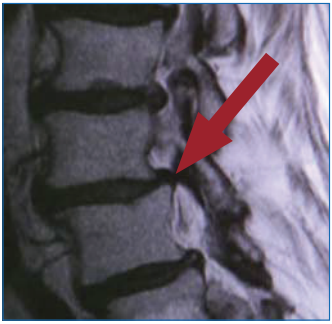
> Wear and tear as part of the normal aging process
> Congenital factors such as a hollow back, spondylolisthesis or malformation of the spine

What are the most common symptoms of spinal stenosis?

> Back pain worsening over the years and radiating to the legs
> Abnormal sensation and in severe cases a loss or strength in arms and/or legs
> Increased pain on standing or walking; bending forwards reduces the pain temporarily

joimax® methods begin where conventional treatment can no longer help

THE SPINAL CANAL STENOSIS SURGERY



MRI side view: herniated disc (arrow) in the lumbar spine

MRI view (cross section): herniated disc (arrow) in the lumbar spine

How is spinal stenosis diagnosed?

> Physical and clinical examination
> Palpation of the back muscles and sometimes reflex testing
> CT and/or MRI scan

When is surgery for spinal stenosis necessary?

The degree of pinching and the resulting pain indicate whether surgery is necessary. First conservative treatments are applied to the spine for pain relief, e.g. physiotherapy, muscle training or massage. Pain-relieving and anti-inflammatory medication can also help alleviate pain. If the symptoms have not lessened after at least 3 months of treatment, or the pain has increased significantly or the narrowing of the vertebral canal is advanced, than an operation is considered.

Endoscopic surgery for spinal stenosis – 3 steps to pain relief

If surgery is necessary, it should be as gentle as possible. With our advanced surgical procedure, the **joimax® method**, surgeons use modern, technically-sophisticated instruments and devices working through a „keyhole" approach. An incision only a few millimeters long is made. The tissue is carefully moved aside; it is not dissected, so ligaments, muscles and bones remain intact. The risk of infection is also significantly lower.

1st step – Access

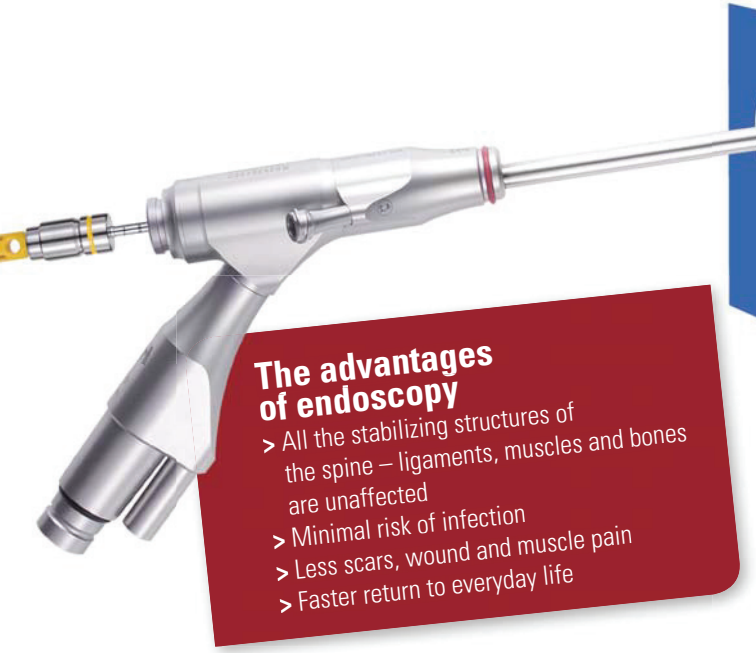
For access to the vertebral canal, a natural opening is utilized – either the intervertebral foramen or the interlaminar window. Diagnostic MRI and/or CT imaging allows selection of the best access route to the structures that are impinging the neural structures within the vertebral canal. Through the „keyhole" approach, the surgeon creates a canal to the narrowing structures.

2nd step – The impinging tissue is removed

The „keyhole" now allows different instruments to be inserted, for example, a diamond abrasor, to remove bony structures that are impinging the neural elements of the spine. By using a specialized endoscope, the surgeon has a fully illuminated and detailed view on all structures in the vertebral canal within a safe working environment.

3rd step – Review and completion

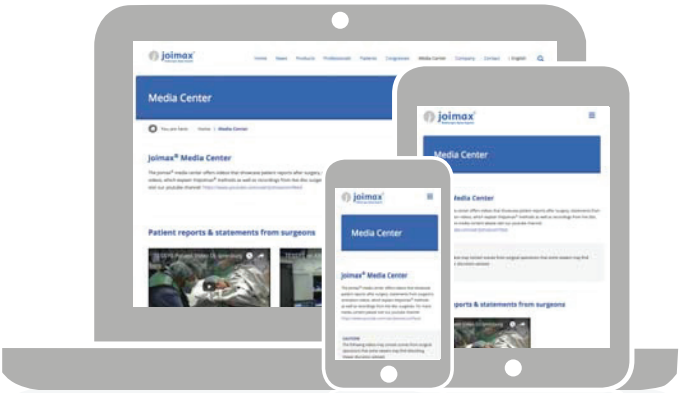
At the end of the operation, the surgeon will check if the affected neural elements are moving freely. At this point, all instruments are removed and the small incision is closed with one or two stitches and a dressing. You are usually back on your feet after a few hours. Your doctor will let you know when you can go home and return to normal activities.



The advantages of endoscopy

- All the stabilizing structures of the spine – ligaments, muscles and bones are unaffected
- Minimal risk of infection
- Less scars, wound and muscle pain
- Faster return to everyday life

Surgery to relieve the spinal stenosis is particularly gentle and effective with the joimax® surgery method.



If you would like further information,

please visit our website **www.joimax.com** for more about spinal stenosis and its treatment. There is also information about other spine conditions and the endoscopic treatment options.

Important!
All the information in this leaflet is general in nature and not intended to replace a personal, detailed consultation with a doctor.

© 2017 joimax® GmbH. All rights resrved

Your therapy partner

BROPATSTEEN_2017-08

Publisher:

joimax® GmbH
Amalienbadstrasse 41, RaumFabrik 61
76227 Karlsruhe, Germany
E-Mail info@joimax.com
Net www.joimax.com

joimax®, Inc.
14 Goodyear, Suite 145
Irvine, CA 92618-3759, USA
E-Mail info@joimaxusa.com
Net www.joimax.com