

LUMBAR SPINAL STENOSIS

— Definition and cause

Lumbar spinal stenosis is a **progressive narrowing of the canal** through which the nerves for the **lower limbs** and the perineum pass. This narrowing, or stenosis, is the result of osteoarthritis in the spinal cord. As the osteoarthritis develops, the tissue and ligaments sag and then swell out into the canal. The joints between the vertebrae become deformed and expand (osteophyte or bone spur). Sometimes the vertebrae are progressively displaced in relation to each other (degenerative spondylolisthesis, scoliosis or dislocation).

— Evolution

The nerves adapt to this narrowing throughout the initial period of the disease, which can remain totally undetected for years. Then, when you reach a certain degree of stenosis, nerve damage will lead to **pain** and/or **difficulties in walking**.

— Symptoms

The most common symptom of lumbar spinal stenosis is intermittent claudication. This means a difficulty in walking that arises progressively after a certain walking distance (a few hundred meters, sometimes much less), forcing the person to stop for a few minutes before continuing. It may be weakness in the legs or **sciatica** in one or both legs. This generally evolves toward a worsening and a progressive shortening of the walking perimeter. Paralysis can occur in the most developed stages. When lumbar spinal stenosis is combined with spinal instability or scoliosis, low back pain often appears along with these symptoms in the legs.

— Examinations

Lumbar spinal stenosis is easily diagnosed on a **scan of the lumbar spine**. More general **X-rays** of the **spinal cord** must also be performed to gain an overall view and to detect any vertebral instability.

— Treatment possibilities

Currently, there is **no treatment to keep osteoarthritis of the spine from developing**, not even to slow its evolution; there is no treatment to be applied so long as the lumbar spinal stenosis does not cause the person to suffer. When the symptoms appear, the medical treatment combines analgesics and anti-inflammatory medication, and sometimes massages or infiltrations. The purpose of this treatment is to calm the inflammation around the **compressed nerve roots** and, if possible, to put an end to the flare-up. The general tendency is still toward progressive worsening of the situation, often over several years. Depending on how the situation evolves, the physician and the patient will try to ascertain the effectiveness of this treatment and may seek surgical advice if necessary.

— Surgery

If the evolution is not good, and depending on the seriousness of the symptoms shown by the patient, how long they have been developing and the severity of the lumbar spinal stenosis, the surgeon will decide on whether there is a need for surgery to **relieve the compression on the nerve roots** in question. This surgery is performed through the back. The aim is to remove part of the rear portion of the vertebra (laminectomy) to make enough room for the nerve roots and to enable the spine to continue its ageing process without leading to new compressive phenomena.

Lumbar spinal stenosis surgery is one of the **most common spinal interventions** and has existed for more than 50 years. It is important to consider 2 elements for such an operation to be a success:

- **Do not wait for paralysis to set in before having the operation:** once the first signs of paralysis appear, nerve recuperation, even after surgery, remains uncertain. It should be pointed out that spinal surgery does not regenerate a nerve whose lesion is definitive, it just causes decompression, placing the nerve in an optimum environment for the lesion to heal spontaneously.
- Knowing how to diagnose patients who only need **neural decompression and those who require an additional spinal stabilization act** is indispensable for the long-term results. This stabilization is achieved through internal fixation, in other words by installing implants to strengthen the spine, usually with screws.

— Clinical post-operative care

You can usually get out of bed for the first time the day of the operation. Immobilisation is not necessary, nor is a corset brace, except in cases where internal fixation is applied. The physiotherapist teaches you the gestures that you will need to apply during your convalescence: how to get up, go to bed, bend down, pick up objects off the floor, personal hygiene. While you are at the clinic, you will retrieve a certain degree of autonomy in performing these everyday gestures. Prescriptions are given when leaving, including bandages, pain medication and sick leave up until the check-up consultation.

Only an experienced practitioner can make a precise spinal pathology diagnosis. The practitioner's role is to determine whether a disc or spine anomaly discovered during an imaging exam is pathological in nature. They will then have to determine the risk and potential evolution involved, a key component in therapeutic decision-making. The diagnosis will make it possible to identify, from among these anomalies, those that are not responsible for the symptoms, that do not entail any risk and therefore do not require any particular treatment.

— Convalescence

Once back home, the ideal pace of life combines rest in a comfortable position (in a semi-recumbent position with the back at a 45° incline, legs slightly bent at the knees), alternating several times a day with **quiet walking** on a flat surface, initially for 10-15 minutes and increasing up to an hour or two.

For the first 2-3 weeks, do not try to return to your everyday activities (housework, grocery shopping, driving, carrying even light loads).

Then, once this initial period has passed, physical therapy will begin with massages of scar tissue and painful or contracted areas in the spine. Once your body is prepared, rehabilitation will start with movement to loosen up your body and to strengthen the spinal cord and lower limbs. It can take several weeks to several months for the patient to recover endurance, depending on the initial lesions.

During this period, you will be allowed to return to all your usual activities very progressively, listening to your body and any pain when exerting an effort, which you should take as your limit.

Over the long term, there are no particular contraindications and you will be able to lead an active life and practice sports perfectly normally.

Images of our surgical techniques?
Visit the [Lumbar Spinal Stenosis](#) page on our website.

