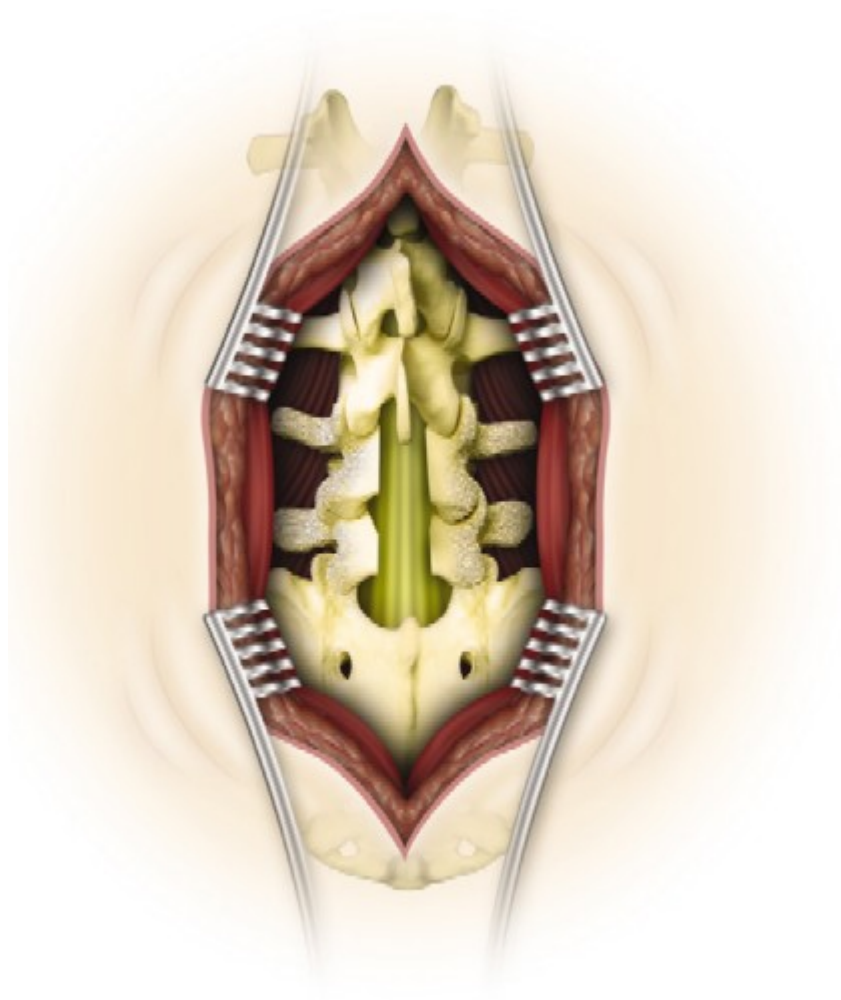


Lumbar laminectomy



[William Jason Mixter](#) and [Joseph S. Barr](#) developed lumbar [laminectomy](#) in 1934.

[Lumbar laminectomy](#), represents the standard operative treatment for [lumbar spinal stenosis](#), but this [procedure](#) is often combined with [fusion](#) surgery. It is still discussed whether minimal-invasive decompression procedures are sufficient and if they compromise spinal stability as well.

The most common surgical method currently used is [lumbar laminectomy](#), with complete decompression; this technique has a 5-year follow-up effective rate of 81.6% ¹⁾.

In many cases, the surgeon will remove arthritic bone and other structures that may be putting pressure on spinal nerves. This is called a [lumbar decompression](#).

Indications

This [lumbar spine surgery](#) is typically performed to alleviate pain caused by neural impingement that can result from [lumbar spinal stenosis](#).

The lumbar laminectomy is designed to remove a small portion of the bone over the [nerve root](#) and/or [disc](#) material from under the nerve root to give the nerve root more space and a better healing environment.

Technique

Wide laminectomy via bilateral paraspinal exposure is the conventional surgical approach for the decompression of spinal canal stenosis. This classic technique allows maximal operative exposure for bilateral neural canal and/or foraminal decompression. There is a resulting extensive violation of the [paraspinal muscles](#), the [interspinous ligament](#), the [supraspinous ligament](#), posterior bone elements and sometimes the capsular facet.

Although [lumbar laminectomy](#) is the standard option of neural structure decompression, it can cause instability ²⁾ and result in a less favorable outcomes at long-term follow-up ³⁾.

Various technical modifications of the standard laminectomy have been reported in an attempt to adequately treat patients with spinal stenosis while maximizing the structural preservation of the spine ^{4) 5) 6) 7) 8) 9) 10)}.

Minimally Invasive Lumbar Laminectomy

Laminectomy and bilateral laminotomy are the standard procedures for decompression of lumbar spinal stenosis (LSS). With the aim of less invasiveness and better preservation of spinal stability, the technique of [unilateral laminotomy](#) for bilateral decompression (ULBD) was developed, it is a less destabilizing alternative to [lumbar laminectomy](#) and leads to good short-term outcomes. However, little is known about the long-term results including predictive factors.

see [Minimally Invasive Lumbar Laminectomy](#).

Complications

see [Lumbar laminectomy complications](#).

Case series

[Lumbar laminectomy case series](#)

¹⁾

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