# Laminectomy

## Definition

Laminectomy is surgery to remove the lamina. This is part of the bone that makes up a vertebra in the spine. Laminectomy may also be done to remove bone spurs or a herniated (slipped) disk in your spine. The procedure can take pressure off your spinal nerves or spinal cord.

## Alternative Names

Lumbar decompression; Decompressive laminectomy; Spine surgery - laminectomy; Back pain - laminectomy; Stenosis - laminectomy

## Description

Laminectomy opens up your spinal canal so your spinal nerves have more room. It may be done along with a diskectomy, foraminotomy, and spinal fusion. You will be asleep and feel no pain (general anesthesia).

During surgery:

- You usually lie on your belly on the operating table. The surgeon makes an incision (cut) in the middle of your back or neck.
- The skin, muscles, and ligaments are moved to the side. Your surgeon may use a surgical microscope to see inside your back.
- Part or all of the lamina bones may be removed on both sides of your spine, along with the spinous process, the sharp part of your spine.
- Your surgeon removes any small disk fragments, bone spurs, or other soft tissue.
- The surgeon may also do a foraminotomy at this time to widen the opening where nerve roots travel out of the spine.
- Your surgeon may do a spinal fusion to make sure your spinal column is stable after surgery.
- The muscles and other tissues are put back in place. The skin is sewn together.
- Surgery takes 1 to 3 hours.

## Why the Procedure Is Performed

Laminectomy is often done to treat spinal stenosis (narrowing of the spinal column). The procedure removes bones and damaged disks, and makes more room for your spinal nerve and column.

Your symptoms may be:

- Pain or numbness in one or both legs.
- Pain around your shoulder blade area.
- You may feel weakness or heaviness in your buttocks or legs.
- You may have problems emptying or controlling your bladder and bowel.
- You are more likely to have symptoms, or worse symptoms, when you are standing or walking.

You and your doctor can decide when you need to have surgery for these symptoms. Spinal stenosis symptoms often become worse over time, but this may happen very slowly.

When your symptoms become more severe and interfere with your daily life or your job, surgery may help.

## Risks

Risks of anesthesia and surgery in general are:

- Reaction to medicine or breathing problems

- Bleeding, blood clots, or infection

Risks of spine surgery are:

- Infection in wound or vertebral bones
- Damage to a spinal nerve, causing weakness, pain, or loss of feeling
- Partial or no relief of pain after surgery
- Return of back pain in the future
- Spinal fluid leak that can lead to headaches

If you have spinal fusion, your spinal column above and below the fusion is more likely to give you problems in the future.

## Before the Procedure

You will have an x-ray of your spine. You may also have an MRI or CT myelogram before the procedure to confirm that you have spinal stenosis.

Tell your health care provider what medicines you are taking. This includes medicines, supplements, or herbs you bought without a prescription.

During the days before the surgery:

- Prepare your home for when you leave the hospital.
- If you are a smoker, you need to stop. People who have spinal fusion and continue to smoke may not heal as well. Ask your doctor for help.
- For the one week before surgery, you may be asked to stop taking blood thinners. Some of these drugs are aspirin, ibuprofen (Advil, Motrin), and naproxen (Aleve, Naprosyn). If you are taking warfarin (Coumadin), dabigatran (Pradaxa), apixaban (Eliquis), rivaroxaban (Xarelto), or clopidogrel (Plavix), talk with your surgeon before stopping or changing how you take these drugs.
- If you have diabetes, heart disease, or other medical problems, your surgeon will ask you to see your regular doctor.
- Talk with your surgeon if you have been drinking a lot of alcohol.
- Ask your surgeon which medicines you should still take on the day of the surgery.
- Let your surgeon know right away if you get a cold, flu, fever, herpes breakout, or other illnesses you may have.
- You may want to visit a physical therapist to learn some exercises to do before surgery and to practice using crutches.

On the day of the surgery:

- You will likely be asked not to drink or eat anything for 6 to 12 hours before the procedure.
- Take the medicines your doctor told you to take with a small sip of water.
- Your provider will tell you when to arrive at the hospital. Be sure to arrive on time.

## After the Procedure

Your provider will encourage you to get up and walk around as soon as the anesthesia wears off, if you did not also have spinal fusion.

Most people go home 1 to 3 days after their surgery. At home, follow instructions on how to care for your wound and back.

You should be able to drive within a week or two and resume light work after 4 weeks.

## Outlook (Prognosis)

Laminectomy for spinal stenosis often provides full or some relief from symptoms.

Future spine problems are possible for all people after spine surgery. If you had laminectomy and spinal fusion, the spinal column above and below the fusion are more likely to have problems in the future.

You could have other future problems if you needed more than one kind of procedure in addition to the laminectomy (diskectomy, foraminotomy, or spinal fusion).

## References

Bell GR. Laminotomy, laminectomy, laminoplasty, and foraminotomy. In: Steinmetz MP, Benzel EC, eds. *Benzel's Spine Surgery*. 4th ed. Philadelphia, PA: Elsevier; 2017:chap 78.

Derman PB, Rihn J, Albert TJ. Surgical management of lumbar spinal stenosis. In: Garfin SR, Eismont FJ, Bell GR, Fischgrund JS, Bono CM, eds. *Rothman-Simeone and Herkowitz's The Spine*. 7th ed. Philadelphia, PA: Elsevier; 2018:chap 63.

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