Spinal Nerve Decompression

What is it?
Spinal nerve decompression is a surgery to take pressure off compressed or “pinched” nerves in your spine. In the simplest form of this surgery, a surgeon removes bone and soft tissues on the back of your spine to make the spinal canal larger. This is called lumbar laminectomy [lam-in-ECK-toh-mee]. Spinal nerve decompression can be combined with other surgeries such as lumbar microdiscectomy [mic-ro-disk-ECK-toh-mee] (LMD) and lumbar spinal fusion.

Why do I need it?
Your doctor may recommend spinal nerve decompression if you are having symptoms caused by a pinched nerve in your spine. A pinched nerve can cause pain, numbness, weakness, and sometimes problems controlling the bladder or bowels. Conditions that may pinch spinal nerves include spinal stenosis (narrowing), bone spurs, bulging or herniated discs, misaligned bones, or a degenerative disease like arthritis.

How effective is spinal nerve decompression?
This surgery is usually very effective if your main problem is leg pain, and your doctor thinks it’s caused by a pinched nerve. Once the pressure is relieved, the nerve pain usually disappears.

Spinal nerve decompression improves other problems caused by pinched nerves less often. However, the surgery can prevent tingling, numbness, or weakness as well as bowel or bladder problems from getting worse.

If your problem is back pain, spinal nerve decompression by itself does not help.

How do I prepare for surgery?
Take these steps to help your surgery and recovery go better:

• **Stop smoking.** If you smoke, try to stop before your surgery. Non-smokers have fewer complications related to surgery. More importantly, smoking slows bone healing and could cause your surgery to fail.

• **Stop certain medicines.** Be sure to discuss all medicines you take with your surgeon (including over-the-counter medicines and vitamins). You may need to stop taking certain medicines in advance of your surgery including:
  – Aspirin 2 weeks before surgery.
  – Anti-inflammatory medicines, such as ibuprofen (Advil, Motrin) and naproxen (Aleve), 1 week before surgery.
  – Blood thinners (your surgeon can tell you when to stop based on the medicine).

You can continue to take most of your other regular medicines.
• Ask for time off work. Ask your doctor how long you may need to be off work, and make arrangements with your employer.

• Ask for someone to drive you home. Arrange for someone to drive you home from the hospital and to help you at home for the first few days.

What happens before the surgery?
You will be admitted to the hospital on the day of the surgery. As you get ready to enter the hospital:

• Follow all instructions on when to stop eating and drinking before your surgery. This will help prevent anesthesia complications.

• Prepare a list of all your current medicines, and bring it with you to the hospital. This includes over-the-counter medicines and vitamins.

• Expect to fill out some paperwork once you get to the hospital. This may include a consent form for the surgery.

What happens during the surgery?
Surgery to decompress spinal nerves can be relatively simple, or very complicated and involves these steps:

1. An anesthesiologist will put you to sleep so you will not feel or remember the surgery. You will also be given antibiotics to help prevent infection.

2. You will be placed on your stomach so the surgery can be done from your back, at or near your spine.

3. The surgeon will make an incision (cut) in your back and move muscle out of the way to expose your spine. The size of the incision depends on the conditions causing the nerve pressure and how widespread those conditions are in your spine.

4. The surgeon will remove the abnormal material that is causing the pressure on your spinal nerves (see illustration below left). This may include bone, ligaments or other soft tissues, or both.

5. Surgery is usually done with the help of a microscope, which allows the surgeon to see and protect the nerves.

6. If spinal nerve decompression is being done in combination with other procedures, such as a fusion, the other procedures will be completed before the wound is closed.

7. When the surgeon is satisfied that all pressure on the nerves has been removed, the wound is closed with stitches or staples.

How long decompression surgery takes will depend on the severity and extent of the nerve compression, variations in your anatomy, and scar tissue from previous surgeries. Your surgeon will give you a general idea of how long it will take, but may not know for sure until the surgery is in progress.

![Diagram of spine and nerves](image-url)
What happens after the surgery?

- You will wake up from surgery in a recovery area of the hospital. Within about 30 minutes, you will be taken to your hospital room.
- Your leg pain will most likely be better or gone. However, you may feel new back pain in the area where the surgery was done. You will be given medicine for the pain.
- You will be up and walking the day of the surgery. Nurses and physical therapists will be there to help you.
- By the time you go home, you should be able to get around on your own and take care of your own personal needs. Your pain should be well controlled with medicines.
- Most patients go home within a day or 2. More complex cases may require a longer hospital stay.

What happens when I go home?

- **Use pain medicine as directed.** When you leave the hospital, your pain should be under good control. Your doctor will talk to you about continuing to manage your pain with medicines. Follow these precautions:
  - Don't take aspirin for 5 days after surgery.
  - Take your pain medicine as soon as you need it. Don't wait for the pain to get too bad.
- **Follow your doctor’s instructions for wound care.**
- **Avoid strenuous activity.** Most people can resume many of their regular activities within just a few days after surgery. However, you should avoid strenuous activities (heavy lifting and bending or twisting at the waist) for about 3 months after surgery. If you can't lift something easily with one hand, then don't lift it. After 3 months, you should be able to resume almost all of your normal activities.
- **Return to work when your surgeon advises.** Expect to be off work at least several days to weeks, depending on the type of work you do. If your work is physically strenuous and a light duty assignment is not available, you may need to be off work for up to 3 months. Most patients return to work much sooner.

My questions about this surgery:

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## What are the benefits and risks of spinal decompression surgery?

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<tr>
<th>Potential Benefits</th>
<th>Risks and potential complications</th>
<th>Alternatives</th>
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<tr>
<td>• May improve or eliminate pain caused by a pinched nerve</td>
<td>• <strong>Blood loss.</strong> Blood loss is usually very small. But as with any surgery, there is always the potential for major or even life-threatening blood loss.</td>
<td>Spinal nerve decompression is usually done after non-surgical treatment options have failed. These may include:</td>
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<td>• Can prevent numbness or weakness from getting worse</td>
<td>• <strong>Infection.</strong> Even with antibiotics and careful sterile techniques, there is still a very small risk of developing a wound infection.</td>
<td>• Medicines</td>
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<td>• With laminectomy (the simplest decompression surgery) the spine continues to function as normal and does not lose movement or mobility</td>
<td>• <strong>Damage to the nerve sac, with leak of spinal fluid</strong> <em>(2 to 5 people out of 100).</em> If the nerve sac is unintentionally opened during surgery, it will be repaired. This should not have any effect on your long-term outcome, but you may have to spend a day or two flat in bed to allow the repair to strengthen. Rarely, further treatment may be necessary.</td>
<td>• Physical therapy</td>
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<td>• Recovery is usually fast</td>
<td>• <strong>Damage to spinal nerves or the spinal cord.</strong> In the event of damage to your nerves or spinal cord, you could be left with permanent pain, numbness, or weakness in your legs.</td>
<td>• Traction</td>
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<td>• <strong>Spinal instability (rare).</strong> To relieve pressure on your nerves, the surgeon removes the bone and soft tissues causing the pressure. This will weaken your spine a little. Most patients have enough reserve strength in the spine to tolerate this. But in a few patients, it can cause spinal instability. If this happens, you may need more surgery to fuse the weakened disc.</td>
<td>• Spinal injections</td>
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<td>• <strong>Failure to relieve symptoms.</strong> Your surgeon will do everything possible to give you the best results. Even so, surgery may not relieve all your symptoms.</td>
<td>• Watching and waiting</td>
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<td>Spinal nerve decompression is the only way a doctor can directly remove the pressure on your nerves. No other alternatives exist.</td>
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<td>If you feel your symptoms are not severe enough to have surgery, tell your doctor. He or she will respect your decision.</td>
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### My questions about benefits, risks, and alternatives:

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