

Lumbar Microdiscectomy

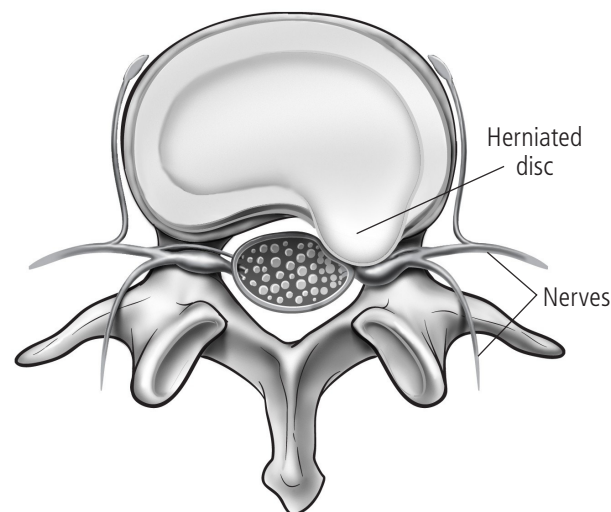
What is it?

Lumbar microdiscectomy (LMD) is a procedure to remove diseased or damaged disc material away from spinal nerves.

Why do I need it?

Spinal discs are made of soft material that cushions the vertebrae. Sometimes the discs can bulge or move out of place and push against spinal nerves. This condition is called a disc herniation. (It can also be called a disc bulge, protrusion, or slipped disc.) A disc herniation can cause severe pain in your legs. This pain is called sciatica or radiculopathy.

The goal of the surgery is to remove the abnormal disc material and take the pressure off the nerves. When the pressure goes away, the nerve pain almost always improves.



The disc has moved out of place and is pressing on the nerve. During microdiscectomy, a surgeon removes the part of the disc that is pressing on the nerve.

Potential benefits	Risks and potential complications	Alternatives
• May improve or eliminate leg pain caused by a pinched nerve from a disc herniation • Can be done through a very small incision, making it a "minimally invasive" procedure • Healthy disc material remains in place and can continue its normal function • Does not damage neighboring discs	• Blood loss. Blood loss is usually very small. But as with any surgery, there is the potential for major or even life-threatening blood loss. • Infection (fewer than 1 in 100 cases). Even with antibiotics and careful sterile techniques, there is still a very small risk of developing a wound infection. • Damage to the nerve sac, with leak of spinal fluid (2 to 5 in 100 cases). 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. • Damage to spinal nerves or the spinal cord (fewer than 1 in 10,000 cases). In the event of damage to your nerves or spinal cord, you could have permanent pain, numbness, or weakness in your legs. • Recurrence of disc herniation (2 to 5 in 100 cases). Another piece of disc can break loose and move up against the nerve. If it does, your symptoms may return and you may need more surgery. This can happen any time from a few days to a few years after surgery. • Painful instability (2 to 5 in 100 cases). LMD can weaken your disc. In a few patients this can cause pain or instability. If this happens, you may need more surgery to fuse the weakened disc. • Failure to relieve symptoms. Your surgeon will do everything possible to give you the best results. Even so, surgery may not relieve all your symptoms.	Lumbar microdiscectomy is usually done after non-surgical treatment options have failed. These can include: • Medications • Physical therapy • Traction • Spinal injections • Watching and waiting Alternative surgeries have been developed to treat herniated discs, but none is as effective as LMD. If you feel your symptoms are not severe enough to have surgery, tell your doctor. He or she will respect your decision.

How do I prepare for surgery?

Take these steps to help your surgery and recovery go better:

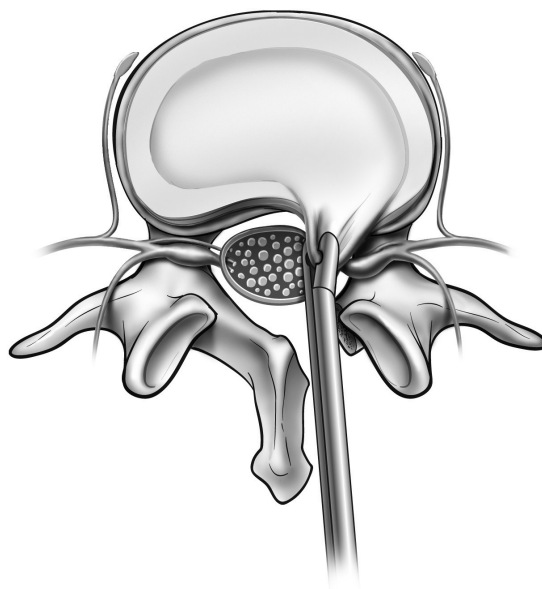
- **Stop smoking.** If you smoke, try to stop before your surgery. Non-smokers have fewer bleeding complications related to surgery. Also, people who smoke have more disc problems and more back pain than people who don't.
- **Stop certain medications.** Stop taking aspirin 2 weeks before surgery. Stop taking anti-inflammatory medications such as ibuprofen (Advil, Motrin) and naproxen (Aleve) 1 week before surgery. Tell your doctor if you are taking any blood thinners so your doctor can help you stop these as well. You can continue to take most of your other regular medications. Tell your doctor everything you're taking so your doctor can help you know what to stop.
- **Ask for time off work.** Ask your doctor how long you may need to be off work, and make arrangements with your employer.
- **Ask 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?

- Do not eat or drink anything after midnight the night before the surgery.
- Take your regular medications (as directed by your surgeon) as normal, with a few sips of water.
- You will be admitted to the hospital on the day of the surgery.
- Bring a list of all your current medications with you to the hospital. This includes over-the-counter medications and vitamins.
- You may need to fill out some paperwork, including a consent form for the surgery.

What happens during the surgery?

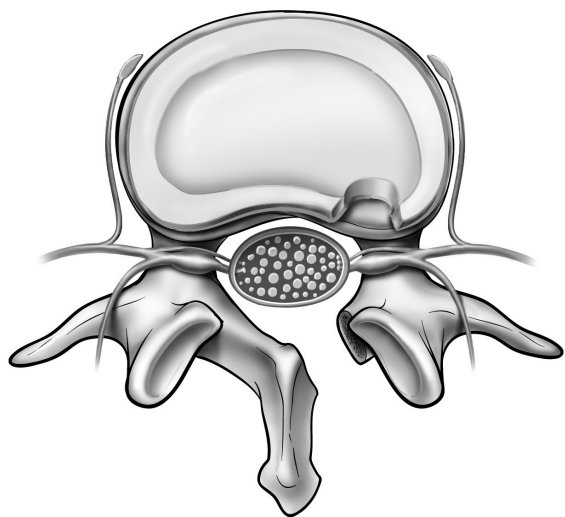
- 1 An anesthesiologist will put you to sleep so you will not feel or remember the surgery. You will also be given antibiotics to help prevent infection.
- 2 You will be placed on your stomach so the surgery can be done from your back, at or near your spine.
- 3 The surgeon will make a small incision (cut) in your back, and move muscle out of the way to expose your spine.
- 4 The surgeon will make a small opening (laminotomy) in your spine. Usually this is done by removing bone with a small drill.
- 5 Using a microscope, the surgeon will identify the nerves and the disc.
- 6 The surgeon will remove abnormal disc material that is pressing on your nerve and leave healthy disc in place.
- 7 When the surgeon is satisfied that all pressure on the nerves has been removed, the wound will be closed with stitches.
- 8 Your surgeon may put a steroid medication on the nerves to help prevent irritation from the surgery.



The surgeon makes an opening in the vertebra and removes the part of the disc that is causing pain.

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.
- The leg pain will most likely be better or gone. However, you may feel new pain in the area where the surgery was done. You'll be given medication for it, and the pain will gradually go away.
- 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 medications.
- Most patients go home the day after surgery. Some go home the same day as the surgery.



Once the disc is no longer pressing on the nerves, the pain usually goes away.

Other frequently asked questions about lumbar microdiscectomy

How long does this surgery take?

LMD usually takes 1 to 2 hours. However, it may take longer if you have scar tissue from previous surgeries, or certain other factors. Your surgeon will give you a rough idea, but may not know until the surgery is in progress.

How effective is microdiscectomy?

LMD is a very effective operation to relieve leg pain from a disc herniation. National statistics show that 85 to 90 percent of patients who have this surgery feel it was worthwhile. It is, therefore, considered the “gold standard” by which all other disc operations are measured. Doctors continue to research other surgical treatments for disc herniation, but so far nothing else has proven as safe and effective as LMD.

LMD is not effective in treating pure back pain. While leg pain usually improves, low back pain may not improve.

Will this surgery affect other spinal discs?

No. Because LMD does not affect the normal function of your disc, it has no effect on other disc levels in your spine.

Why do spinal discs go bad?

Discs are the soft tissue pads between your lumbar vertebrae. They act as a cushion or shock absorber for the bones of your spine. As such, they are subject to extreme mechanical forces. As we age, they begin to wear or deteriorate. They can also be injured. A worn or damaged disc can cause back pain.

A disc herniation is simply a piece of disc material that has broken loose and pushed its way into a place it does not belong. If it pushes up against a nerve root, it can cause severe pain.

What do I do when I go home?

Use pain medication as directed.

When you leave the hospital, your pain should be under good control using a variety of pills.

- Your doctor will direct you about continuing to manage your pain with medications.
- Take your pain medication as soon as you need it. Don't wait for the pain to get too bad.

Avoid strenuous activity.

Within just a few days after surgery, most people are able to resume many of their regular activities. However, you should avoid strenuous activities, including heavy lifting, and bending or twisting at the waist, for about three months following surgery. A good rule of thumb is, if you cannot lift something easily with one hand, then don't lift it.

By three months after surgery, you should be able to resume almost all of your normal activities.

Return to work when your doctor advises.

Expect to be off work at least several days to weeks. The amount of time off work will depend 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 three months. Most patients return to work much sooner. Your doctor will advise you when it is safe to return to work.

When to call the doctor:

Other special instructions: