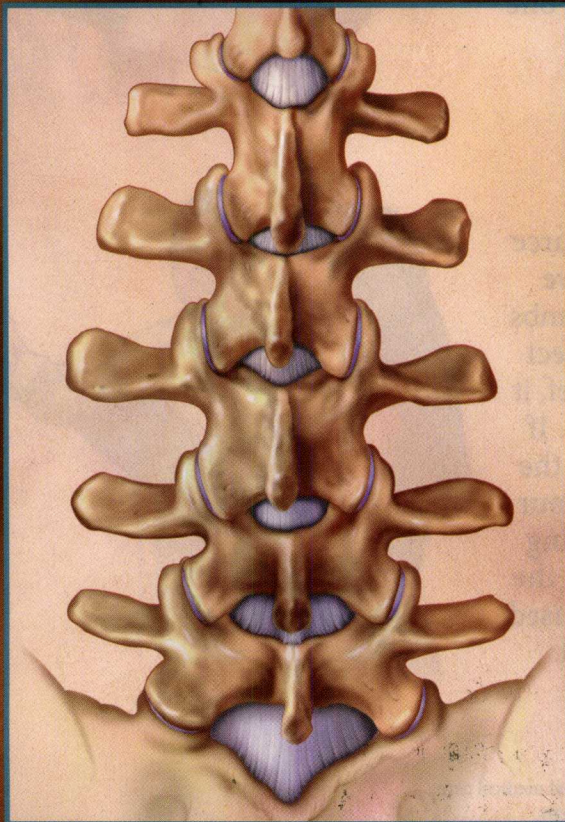


# Lumbar Epidural Injections



Diagnosis  
and Treatment  
to Help  
Reduce Pain

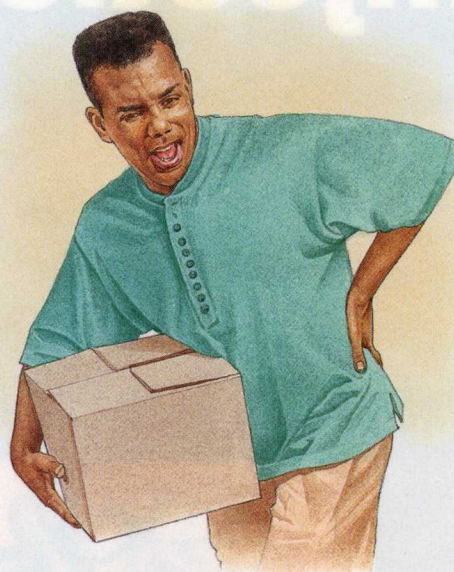


# What Is a Lumbar Epidural Injection?

Your doctor may have suggested you have a **lumbar epidural injection**. This procedure can help relieve low back and leg pain by reducing **inflammation** (swelling and irritation). An injection also can help your doctor diagnose the source of your pain by numbing certain areas of your back. Where you are injected depends on the goal of the injection.

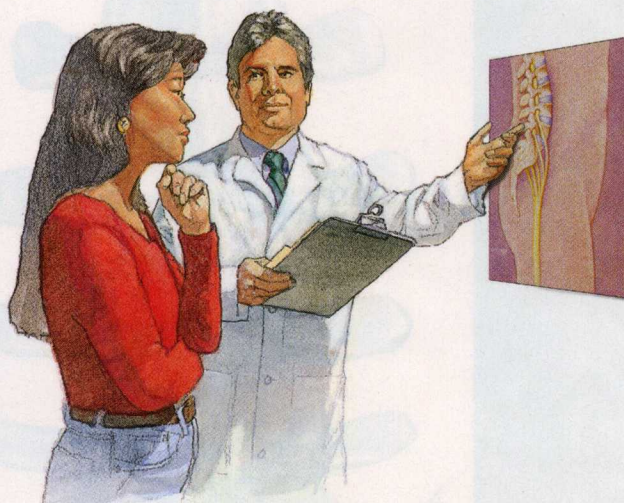
## A Way to Relieve Pain

A lumbar epidural injection won't stop all low back and leg pain. But it can reduce pain and break the pain cycle. This cycle may begin when back pain makes it hard to move. Lack of movement can then slow down healing. By getting you back on your feet, the injection can help speed your recovery. Some people may feel more relief from an injection than others. And some people may need more than one injection to get relief.



## A Tool for Diagnosis

An injection can help locate the source of pain. Also called a **selective nerve block** or a **selective epidural**, it numbs the roots of specific nerves. The effect lasts only briefly. But if you feel relief, it may indicate the source of the pain. If you feel no relief, it may mean that the pain's source is at another level in your spine. Or it may mean that something other than inflammation is causing the pain. Injection results also may be used to help plan back surgery, if needed.





## Understanding Anatomy

Learn more about your back anatomy. That way, you can understand how an injection can help relieve or locate your pain.

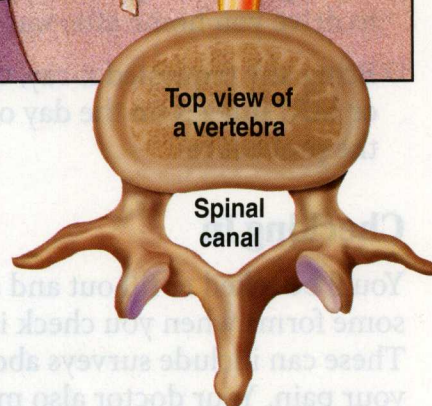
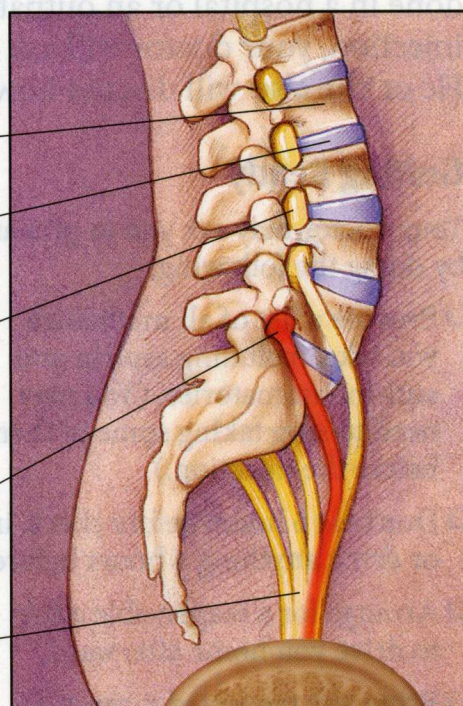
**Vertebrae** are the bones that stack up to form the spine.

**Disks** are “cushions” that provide padding between the vertebrae. A damaged disk can lead to inflammation and pain.

**The spinal canal** is a tunnel that’s formed within the stacked vertebrae. Nerves run through this canal. The nerves are wrapped by a thin layer of tissue.

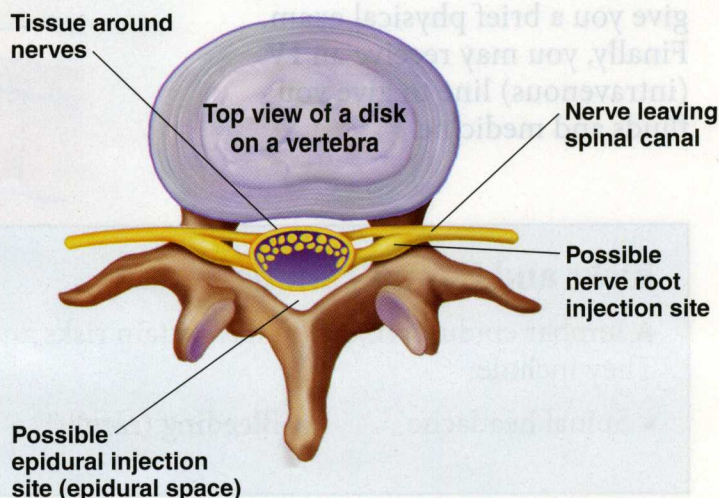
**A nerve root** is the part of a nerve that leaves the spinal canal. Inflamed nerve roots can lead to back pain.

**The sciatic nerve** is a nerve that extends down to the leg. When its nerve roots are inflamed, buttock and leg pain often result.



## Possible Injection Sites

Where the medicine is injected in your spine depends on the goal of the injection. For pain relief, the injection is done in the **epidural space**. This is the area that surrounds the nerves within the spinal canal. To locate the source of the pain, your doctor may target a specific **nerve root**. Medicine is then injected directly onto that nerve root.





# Your Injection Procedure

A lumbar epidural injection is an outpatient procedure. It's often done in a hospital or an outpatient surgery center. Before your injection, your doctor will ask you questions about your health. He or she also will discuss how you need to prepare.

## Getting Ready

Your doctor may ask you to prepare by doing the following:

- ☐ Provide a list of all medicines you take, including aspirin and anti-inflammatories. (You may need to stop taking some of them before the injection.)
- ☐ Don't eat 6 hours before check-in, or drink anything 4 hours before.
- ☐ Arrange for a responsible adult to drive you home afterward.
- ☐ Bring any requested x-ray, CT, or MRI images on the day of the procedure.



## Checking In

You'll be asked to fill out and sign some forms when you check in. These can include surveys about your pain. Your doctor also may give you a brief physical exam. Finally, you may receive an IV (intravenous) line to give you fluids and medicine.

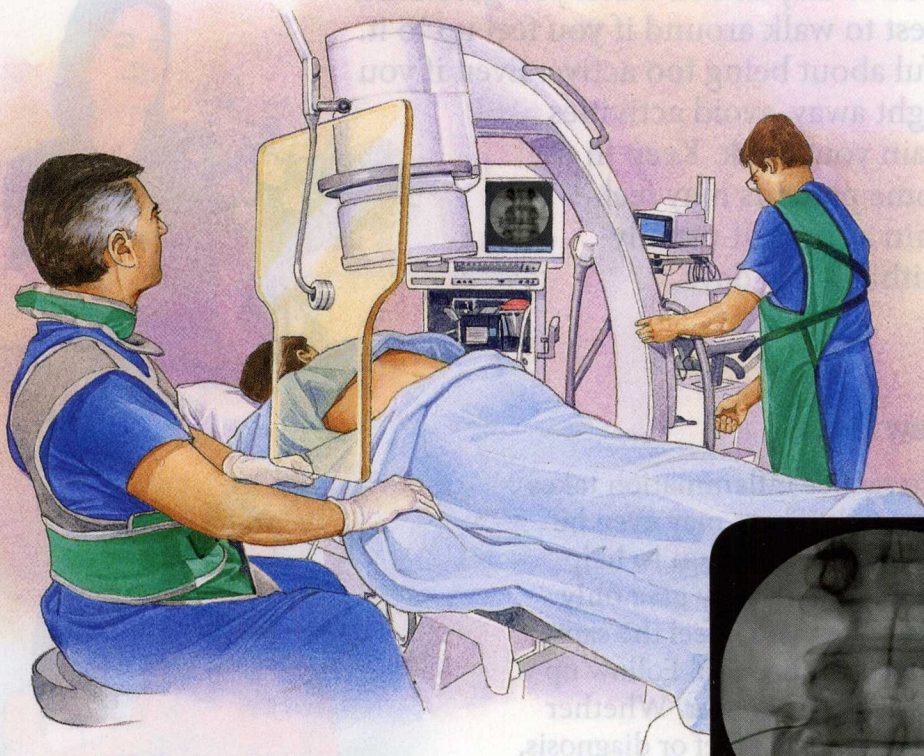


## Risks and Complications

A lumbar epidural injection has certain risks and complications. They include:

- Spinal headache
- Bleeding (rare)
- Infection (rare)

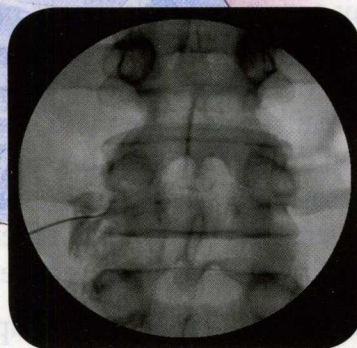




## During the Procedure

The injection takes just a few minutes. But extra time is needed to get ready. You may be given medicine before the injection to help you relax.

- Monitoring devices may be attached to your chest or side. These devices measure your heart rate, breathing, and blood pressure.
- You lie on your stomach or side, depending on where the injection will be given.
- Your back is cleaned and may be covered with sterile towels.
- Medicine is given to numb the skin near the injection site.
- If **fluoroscopy** (x-ray imaging) is to be used, a contrast “dye” may be injected into your back. This helps get a better image.
- A **local anesthetic** (for numbing), **steroids** (for reducing inflammation), or both are injected into the epidural space.



An x-ray image lets the doctor target nerve roots.

## After the Procedure

You’ll spend up to an hour in a recovery area. Before going home, you may be asked to fill out another survey about your pain. You may notice some side effects. They should go away in the first few days. They can include:

- Briefly increased pain
- Headaches
- Trouble sleeping



## When You Get Home

You don't need to stay in bed when you get home. In fact, it's best to walk around if you feel up to it. Just be careful about being too active. Even if you feel better right away, avoid activities that may strain your back. Keep in mind that some patients may feel increased pain at first. It usually goes away within a few days.



### The First Few Days

An injection to reduce inflammation takes a day or two to work. There may even be more pain at first. An injection to help locate the source of pain may give only brief pain relief. Later, you'll feel the same as you did before the injection. Follow up on treatment with your doctor. Whether you were injected for pain relief or diagnosis, these tips will help you recover:

- Take walks when you feel up to it.
- Rest if needed, but get up and move around after sitting for half an hour.
- Don't exercise vigorously.
- Don't drive the day of the procedure or until your doctor says it's okay.
- Return to work or other activities when your doctor says you're ready.



### When to Call Your Doctor

Call right away if you notice any of the following symptoms:

- Severe pain or headache
- Loss of bladder or bowel control
- Fever or chills
- Redness or swelling around the injection site



## Improving Strength and Motion

Exercises and good **body mechanics** (how you move) may help keep pain from returning or worsening. The exercises below help build strength and flexibility. Your doctor may suggest other exercises for you to try. Call your doctor if you feel any new or lasting pain after exercising.

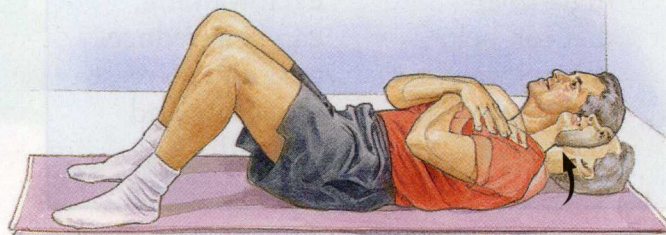
### Pelvic Tilt

- Lie on your back with your knees bent and your feet flat.
- Tighten your stomach and buttocks, and gently press your low back into the bed. This tilts your pelvis.
- Hold for 5 seconds. Repeat 10 times. Do this twice a day.



### Partial Sit-Up

- Lie on your back with your feet flat, your knees bent, and your arms crossed over your chest.
- Slowly raise your head and shoulders off the floor.
- Hold for 5 seconds. Repeat 10 times. Do this twice a day.



### Lifting Safely

No matter how strong your back is, lift safely to prevent injuries. Make it a rule to follow these steps:

- Stand close to the object.
- Bend at the hips and knees. Keep your ears, shoulders, and hips in line.
- Hold the object close to your body.
- Press down with your feet and lift using your legs, not your back.





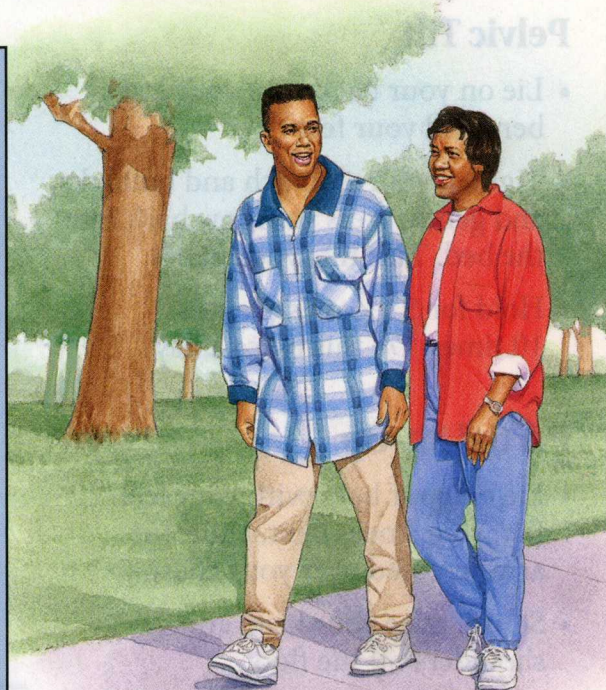
## The Road to a Healthier Back

Whether your injection was for relieving pain or locating pain, you can take steps toward a healthier back. Talk to your doctor. Learn the best way to treat your pain. If it worsens, let your doctor know. But often, your back health is under your control. Exercise and good body mechanics help. Other choices in your life also can make a difference.

### Choosing a Healthy Back

Making the lifestyle choices below can play a role in maintaining back health.

- |   |  |
|---|--|
| <input type="checkbox"/> <b>Quit smoking.</b><br>Nonsmokers are less likely than smokers to have back pain.                 | <input type="checkbox"/> <b>Manage stress.</b><br>Keeping stress in check can ease and may prevent back pain.                                |
| <input type="checkbox"/> <b>Eat healthy.</b><br>A low-fat, high-fiber diet can help control weight and improve back health. | <input type="checkbox"/> <b>Stay active.</b><br>Physical activity, even walking, can help reduce pain and increase flexibility and strength. |



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