For Low Back & Leg Pain

A lumbar selective nerve root block is a type of epidural steroid injection for treating low back and leg pain. This information sheet will explain what it is. Your doctor can explain if it is for you.

What is the epidural space?
The dura is a protective covering of the spinal cord and its nerves. The space surrounding the dura is called the epidural space. In the lower back it is called the lumbar epidural space.

What causes pain in the epidural space?
The lumbar area of the spine has five bones, called vertebrae. Soft discs found between these vertebrae cushion them, hold them together, and control motion.

If a disc tears, chemicals inside may leak out. This can inflame nerve roots or the dura, and cause pain.

A large disc tear may cause a disc to bulge, inflaming nerve roots or the dura, and cause pain. Bone spurs, called osteophytes, can also press against nerve roots and cause pain.

How do I know if I have disc and nerve root pain?
If you have pain in your low back when you bend your back, you may have lumbar disc and dural inflammation. If pain travels to your leg and is worse when you move your back, you may have nerve root inflammation.

Common tests such as MRIs can show disc bulges and nerve root compression, but may not always show a torn and leaking disc. A lumbar epidural injection can help to determine if disc problems, or dural, or nerve root inflammation are causing your pain.

What is a lumbar selective nerve root block?
In a lumbar epidural injection, an anesthetic and a steroid are injected into the epidural space to reduce inflammation. If the needle is positioned next to an individual nerve root, it is called a selective nerve root block. This technique puts medication directly along an inflamed nerve root.

What happens during an injection?
The injection may start with an IV (medicine given intravenously) to help you relax and put you into a twilight sleep. A local anesthetic will be used to numb your skin.

The doctor will then insert a thin needle directly into the epidural space. Fluoroscopy, a type of x-ray, may be used to ensure the safe and proper position of the needle. A dye may also be injected to make sure the needle is at the correct spot.

Once the doctor is sure the needle is correctly placed, a local anesthetic (numbing medicine) and corticosteroid (healing medicine) will be injected.
What happens after an injection?

You will be monitored for at least 30 minutes after the injection. When you are ready to leave, the clinic will give you discharge instructions. Keeping track of your pain helps your doctor know what the next steps are for your care.

It may help to move your back in ways that hurt before the injection, to see if the pain is still there, but do not overdo it. Take it easy for the rest of the day. You may feel immediate pain relief and numbness in your back and leg for up to six hours after the injection. Your pain may return after this short pain-free period, or may even be a little worse for a day or two. This is normal. It may be caused by needle irritation or by the corticosteroid itself. Corticosteroids usually take one or two days to start working, but can take as long as a week. Pain relief usually follows this period.

You can usually return to work the day after the injection, but always check with your doctor.

How long can I expect pain relief?

How long you can expect pain relief depends on the amount of inflammation. Sometimes an injection or series of injections bring several months of pain relief, and then further treatment is needed. Other times, these injections bring long-term pain relief. If your pain is caused by injury to more than one area, only some of your symptoms will be helped by these injections.

This pamphlet is for general education only. Specific questions or concerns should always be directed to your doctor. Your doctor can explain possible risks or side effects.