



EPIDURAL STEROID INJECTION

INDICATIONS

LUMBAR: For back pain/sciatica (Maximum of 3 injections at weekly intervals of 6 per year is the rule used by most)

Injection helps by reducing inflammation in epidural space. It may not stop all pain but it can reduce pain and the break pain cycle. Some people may need more than one injection to get relief.

A TOOL FOR DIAGNOSIS

Injection can help locate the source of neck pain/upper extremity pain OR thoracic midback/nerve root pain OR back pain/sciatica. This is also called selective nerve root block or selective nerve root block or selective epidural injection. It numbs the specific nerve root, which lasts only briefly. If you feel relief in pain, the source of pain is at the level of injection. If you feel no relief, it may mean that the source of pain is at another level in the spine or something other than inflammation is causing the pain. Injection results also may be used to help plan surgery, if needed.

SUCCESS RATE

Duration of Symptoms	Success Rate
< 3 months	83% - 100%
3-6 months	67% - 81%
6-12 months	44% - 69%
12 months	46% -58%

ANATOMY

- VERTEBRAE:** Bones that stack up to form spine.
- DISC:** Cushion that provides padding between vertebrae. Damaged disc can lead to inflammation and pain/tingling/numbness.
- SPINAL CANAL:** Tunnel formed between stacked vertebrae. Nerves run through this canal and are wrapped by a thin layer of tissue (meninges).
- NERVE ROOT:** Part of nerve that leaves the spinal canal. Inflamed nerve roots can produce neck pain/arm pain or thoracic mid-back/nerve root pain or back pain/sciatica.
- BRACHIAL PLEXUS:** Nerve meshwork formed by union of multiple nerve roots and extends down along side of arm. If any of nerve roots of brachial plexus are inflamed, arm pain results.
- SCIATIC NERVE:** Formed by union of multiple nerve roots and extends down along backside of leg. If any of nerve roots of sciatic nerve are inflamed, sciatica often results.



EPIDURAL SPACE: Area that surrounds nerves within spinal canal. Injection is given in this space to relieve neck pain/ arm pain or midback pain or back pain/ sciatica.

INJECTION PROCEDURE

Epidural injection is an outpatient procedure. It is done in hospital or an ambulatory surgery center.

PREPARATION FOR PROCEDURE

Provide a list of all medicines (You may be asked to stop some of them before the procedure). For Sedation Patients: Don't eat 6 hours before check-in or drink anything 4 hours before. Arrange for a driver to take you home after procedure. In difficult circumstances we can provide transportation, but it must be arranged before procedure day.

CHECKING IN

You will be asked to fill out and sign some forms when you check in. These can include questions about your pain. You will receive an IV (intravenous) line to give you fluids and medicine.

RISKS AND COMPLICATIONS

1. Spinal headache (rare)
2. Bleeding (rare)
3. Infection (rare)
4. Paralysis (almost impossible)

DURING THE PROCEDURE

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 injection will be given. Your back is cleaned with antiseptic solution liquid and will be covered with sterile drapes.

Medicine is given to numb the skin at the injection site. Fluoroscopy (x-ray imaging) is used to locate the epidural space, unless you are pregnant. Dye (contrast) will be injected to make a definite identification of epidural space (unless you are allergic to dye). Local anesthetic (for numbing) and steroid (for reducing inflammation) are injected into the epidural space.

AFTER THE PROCEDURE

You will 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



first few days. They include briefly increased pain, headaches, and trouble sleeping. These can be easily helped by medicines given by your doctor and rest.

WHEN YOU GET HOME

You do not need to stay in bed when you get home. In fact, it is best to walk around if you feel up to it. Just be careful of 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. An injection to reduce inflammation takes a day or two to work. An injection to help locate the source of pain may give only brief pain relief. Follow up treatment with your doctor. The following tips will help you recover.

1. Take walks when you feel up to it.
2. Rest if needed, but get up and move around after sitting for half an hour.
3. Do not exercise vigorously.
4. Return to work or other activities when your doctor says you are ready.

WHEN TO CALL YOUR DOCTOR

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

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