

Mid-Tennessee Bone and Joint Clinic

Transforaminal Epidural Injection

The spinal vertebrae are the bones that support the neck and back. There is a tunnel made by the vertebrae known as the spinal canal. The spinal cord runs through the spinal canal inside a sac known as the dura. The nerves branch off the spinal cord and exit to the vertebrae through small openings between vertebrae known as foraminae. Pressure or inflammation of these nerves causes irritation and swelling and it causes radiating pain from the neck and lower back to the upper or lower extremities, respectively. The epidural space is a space surrounding the dura within the spinal canal that is continuous with these nerves.

A transforaminal epidural injection is performed to relieve low back and radiating leg pain, or neck pain and radiating arm pain. This type of epidural injection is used for both diagnostic and therapeutic purposes. The medication injected can help reduce inflammation and swelling caused by spinal conditions such as spinal stenosis, radiculopathy caused by pinched nerves, sciatica, and herniated or bulging discs. The transforaminal approach is a very selective injection around the specific nerve root. By injecting medication around a specific nerve root, the doctor can determine if this nerve root or disc is causing the problem. Many patients get significant relief from one or two injections. In some cases, it may be necessary to repeat the procedure, as improvement can last anywhere from a few days to several months.

The Procedure

- You will lie either on your back or stomach, depending on the approach the doctor will take and the location of your problem area.
- Fluoroscopy (video X-ray guidance) is used to help locate the correct vertebra and nerve root, and a local anesthetic is used to numb your skin.
- Using video X-ray guidance, a thin needle is inserted into the foraminal space near the nerve root.
- Contrast solution (X-ray dye) is injected so the physician can see the painful areas and confirm the correct location of the needle tip.
- A steroid-local anesthetic solution mixture is injected into the foraminal epidural space bathing the painful nerve root with soothing medication.
- The needle is removed and a small bandage will be placed on the tiny area where the needle was injected at each level.

Instructions (Day of Procedure)

- Continue taking your medications as prescribed with the exception of blood thinners.
- If you are taking blood thinning medication, you will be instructed when to stop taking the medication.
- It is recommended you bathe with anti-bacterial soap before the procedure.
- Your procedure will take place at the Surgery Center of Middle Tennessee. You will be contacted and told when to arrive.
- If you have any known allergic reactions to having medication injected, have an active infection, rash, or are pregnant, inform the doctor and/or nursing staff.
- Please bring your insurance card and driver's license.

NOTE: Patients are NOT permitted to drive themselves home after this procedure. Please make arrangements for someone to drive you home.

After the procedure

- After the procedure is completed you will be monitored in the recovery area. When your blood pressure, pulse, and breathing are stable, you should be discharged and able to leave with a responsible adult.
- You may experience some discomfort at the needle placement site(s) following the procedure. This discomfort will subside over the next few days.
- Immediately after the injection, your legs may feel slightly heavy and may be numb. You may feel your pain is gone or quite less. This is due to the local anesthetic injected. This sensation wears off in a few hours. The cortisone used in the injection starts working in approximately 3-5 days and its effect can last anywhere from a few days to several months.

Risks: Generally speaking, this procedure is safe. However, as with any procedure, there are risks including, but not limited to: spinal puncture with headache, infection, bleeding inside the epidural space with nerve damage or worsening of present symptoms, allergic reaction, or no improvement in symptoms.

Possible Side Effects: The most common side effect is pain which is temporary. Other side effects include bruising, swelling, or soreness at the injection site, or transient weakness and numbness. Side effects are related to the use of cortisone which can include weight gain, increased blood sugar, water retention, and suppression of the body's own natural production of cortisone.