

Mid-Tennessee Bone and Joint Clinic

Therapeutic Caudal Epidural Injection with Epidurogram

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. Pressure or inflammation of these nerves causes irritation and swelling and it causes radiating pain from the lower back to the lower extremities. The epidural space is a space surrounding the dura within the spinal canal that is continuous with these nerves.

What is a therapeutic caudal epidural injection? A therapeutic caudal is a radiological guided procedure in which scar tissues and adhesions in the epidural space can be evaluated and/or dissolved around entrapped nerves in the epidural space of the spine. By dissolving scar tissue, medications such as cortisone can better reach the affected areas.

What causes scarring (adhesions)? Sometimes scarring can also occur when a disc is injured, degenerative, or ruptures and its contents leak out irritating the epidural space and exiting spinal nerves. Scarring can also occur due to bleeding into the epidural space following back surgery and the subsequent healing process. It is a natural occurrence following surgical intervention.

The Procedure

- You will lie on your stomach. Fluoroscopy (video X-ray guidance) is used to help locate the correct lumbar vertebra and nerve root and a local anesthetic is used to numb your skin.
- Using video X-ray guidance, a thin needle or catheter is inserted into the caudal epidural space.
- 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 epidural space bathing the painful area with soothing medication. Sometimes a sterile salt solution is injected to soften scar tissue.
- The needle is removed and a small bandage will be placed on the tiny area where the needle was injected.

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.
- Your legs may feel slightly heavy and may be numb. 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.

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 related to the use of cortisone can include weight gain, increased blood sugar, water retention, and suppression of the body's own natural production of cortisone.