

**Rajesh Patel, MD,FIPP,DABPM**

---

**What is the epidural space and what is an epidural injection?**

The covering over the nerve roots in the spine is called the dura. The sleeve-like space surrounding the dura is called the epidural space. Nerves travel through the epidural space before they travel into your arms, chest or legs. The nerves leave the spine from small nerve holes. These nerves may become inflamed due to irritation from a damaged disc or from contact with a bone spur. Inflammation of these nerves in the cervical spine may cause pain in your neck, shoulder or arms. Inflammation of these nerves in the thoracic spine may cause pain in your mid-back, along your ribs, to your chest wall or abdomen. Inflammation of these nerves in the lumbar spine may cause pain in your low back, hip, buttock and legs.

An epidural injection places anti-inflammatory medicine (cortisone) into the epidural space to reduce nerve inflammation, and hopefully reduce your symptoms. By stopping or limiting nerve inflammation we may promote healing, and speed up “mother nature”, thereby reducing your pain. Although not always helpful, epidural injections reduce pain and improve symptoms in most people within 3-7 days. They may provide permanent relief or provide a period of pain relief that will allow other treatments like physical therapy to be more effective.

Your doctor may order up to three epidural injections spaced approximately 2-4 weeks apart. Performing a repeat injection depends on your response to the prior injection. If you obtain excellent relief from an epidural, you do not need to have it repeated. If you have partial sustained benefit (>35% relief) the epidural can be repeated for possible additive benefit. If an epidural injection provides minimal benefit (<35% relief), the physician may choose another injection be performed with a change in the technique and/or cortisone used.

---

**What will happen to me during the procedure?**

First, an IV is started so that you may be given medicine for relaxation if you so desire. Next, while lying face down on a x-ray table your skin will be well cleansed with an antiseptic. The physician will numb a small area of skin over your spine where the epidural needle will be inserted. Next, the physician will use x-ray guidance to direct a small needle into the epidural space. There will be pressure felt with this part of the procedure. He will then inject contrast dye to confirm that the medicine spreads to the affected nerve(s) in the epidural space. After this, the physician will inject a combination of numbing medicine (anesthetic) and time released anti-inflammatory (cortisone).

---

**What should I do and expect after the procedure?**

You may have some partial numbness in your arms or legs from the anesthetic after the injection. This may last several hours but you will be able to function safely as long as you take precautions. You will report your remaining pain (if any) and also record the relief you experience over the next week in a “pain diary” which we will provide. Mail or fax the completed pain diary in the envelope provided, so that your treating physician can be informed of your results and plan future tests and/or treatment if needed.

You may notice an increase in your pain lasting for several days. This occurs after the numbing medicine wears off but before the cortisone has a chance to work. Ice will typically be more helpful than heat during this time. You may begin to notice an improvement in your pain 3-5 days after the injection. Improvements will generally occur within 10 days after the injection.

On the day of the injection, you should not drive, and should rest and avoid any strenuous activities. You may take your regular medications at their usual times after the procedure including your pain medicine if needed. On the day after the procedure, you may return to your regular activities. When your pain was improved, start your regular exercise in moderation. Even if you are significantly improved, gradually increase your activities over 1-2 weeks to avoid recurrence of your pain.