The spine has many diseases that result in painful inflammation of nerves, ligaments, and discs that may respond to epidural steroid injections. These conditions include disc herniations, spinal stenosis, and arthritis of the spine. Epidural injection provide relief from pain when there is inflammation. Disc herniations are commonly known to produce inflammation of the nerves due to spilling out noxious chemicals from the disc onto the nerve root, causing pain from the back to the hand or foot depending on the location of the disc herniation. The epidural space is an area behind the spinal cord and spinal fluid that the nerves cross through in order to leave the spine.

**WHAT IS AN EPIDURAL STEROID INJECTION?**

Epidural steroid injections consist of corticosteroids (not the body builder steroids) that are solids suspended in liquids. The steroids fall out of the solution after injection and serve as a long-lasting reservoir for steroids to gradually dissolve, coating the nerves and relieving some of the inflammation. In the neck, the steroid may contain no solids at all and instead a clear solution of steroid is injected. Epidural steroids will not cure spinal stenosis, do not dissolve or reduce disc herniation size (only surgery or the body's own enzymes can do this). They do provide moderate relief lasting typically for 3-24 weeks or longer and permit greater function while the body is attempting to resorb the disc herniation. Spinal stenosis will not gradually improve over time as is possible with disc herniation, and in the case of spinal stenosis, therefore more frequent injections may be needed. There are three approaches to the epidural space of the low back as seen above: the choice of which often depends on your condition. In the neck, the needles are placed from the back or side of the neck.

**UNDER NO CIRCUMSTANCES SHOULD A PAIN DOCTOR OR ANESTHESIOLOGIST EVER GIVE THESE INJECTIONS WITHOUT X-RAY GUIDANCE SINCE THIS IS NOT ONLY DANGEROUS BUT AT LEAST 50-60% OF THE TIME THE INJECTIONS ARE GIVEN IN THE WRONG PLACE!!!**

**DO THE INJECTIONS HURT?**

When performed properly under x-ray guidance, the injections are not very uncomfortable.

**RISKS:**

Bleeding, infection, nerve injury, spinal cord injury, abscess or blood clots, paralysis, spinal fluid leak with headache, and failure to relieve pain are all risks. Discuss specific risks with your physician prior to the procedure during consultation.
**SPECIAL INSTRUCTIONS:**
You should eat or drink nothing after midnight, continue your normal medications (except those below) with a sip of water, and you should have a driver transport you home.

**MEDICATIONS TO STOP PRIOR TO THE PROCEDURE:**
- Stop Aspirin and Plavix 7 days before the procedure
- Stop coumadin and warfarin 5 days before the Procedure.
- Stop Ticlid (ticlopidine) 14 days before the procedure.

**DISCHARGE INSTRUCTIONS:**
- **Activity:** Resume normal activity today but report any weakness or numbness immediately.
- **Diet:** Resume normal diet
- **Medications:** Resume normal medications unless otherwise instructed.
- **Dressing:** You may have a small band aid or band aids placed over the injection site. This can be removed the next day.

**DISCOMFORT AT THE INJECTION SITE:**
Apply ice wrapped in a washcloth for short periods of time (20 minutes per hour) during the first 24 hours, then apply low to medium heat.

**IV SITE:**
There may be soreness and bruising around the IV site, which will go away in a few days. A warm moist cloth placed over the area for half-hour periods several times a day will sometimes help. Increased tenderness or red streaking around the area of the IV site or increasing swelling of the hand requires attention. Our clinic needs to be notified if this occurs.

**SIDE EFFECTS:**
Steroid side effects include elevation of your blood sugar for a week especially if you are diabetic. More frequent checks of the blood sugar are necessary for the first week after an injection if you are a diabetic. Also steroids may cause increased blood pressure for a week and if you have hypertension or are being treated with medications for hypertension, you need to check your blood pressure more often during the first week. The medication doses for diabetes and high blood pressure may have to be adjusted by your primary care doctor if these are elevated during the first week or so after a steroid containing injection. Some patients experience facial or chest redness or having excessive energy during the first 24 hours after the injection.

If you experience new onset severe generalized weakness during the first week after the injection, call our office. If you develop fever of more than 101 degrees during the first few days after the injection, new weakness or numbness in the arms or legs, severe increase in pain in the back or neck, or loss of bowel or bladder control, notify our office immediately.

**EMERGENCY CONTACT TELEPHONE NUMBER: 911**

**RETURN TO NORMAL ACTIVITIES:**
You may experience some numbness in the skin over the back during the first several hours. Relief from the diagnostic injection may last up to 12 hours. Relief from a steroid injection will begin in 12-24 hours. You may have some numbness in the leg, arm, foot, or hand after the injection. If this was not discussed as a possibility, call your physician to report this, and be extremely careful about walking or standing if this occurs since there is an increased risk of falling if you have numbness.

**ANESTHETIC EFFECTS:**
Refrain from operating motor vehicles within the first 12 hours after the injection. If sedation is given, do not plan to make any important decisions such as signing legal or important papers or consume alcohol or sedatives within 24 hours after the injection.