Epidural Steroid Injection

What is it?
An epidural steroid injection (ESI) is an injection of an anti-inflammatory medication directly on the sac that covers the spinal cord and nerves. Your physician usually orders an ESI when you have symptoms of an irritated spinal nerve. These symptoms can include back, buttock or leg pain, weakness, or numbness. Irritated spinal nerves are often caused by disc herniations or a tight spinal canal (stenosis).

The goal of the ESI is to reduce the inflammation around the spinal cord and nerves, which should reduce the amount of back and leg pain you are experiencing.

Epidural injections are often done in series. It would not be unusual to have two or three injections in a row 10 to 14 days apart. The reason for multiple injections is that the relief from the injection usually wears off over time.

How is it performed?
You will be asked to lie on your side on the x-ray table. This will allow the physician to position you in the best way possible to access your back. Next, the skin will be cleaned and numbed with a local anesthetic. An X-ray machine will then be used to guide a small gauge needle into the space over your spinal sac. A small amount of dye will be injected to insure the needle is in the proper position. Finally, a mixture of numbing medicine and anti-inflammatory (steroid/cortisone) will be injected.

How long does it take?
All together the ESI should take about two hours. The back and legs may feel weak or numb for a couple of hours after the injection. Plan the have someone drive you home.

Are there any restrictions after the ESI?
Try to spend the remainder of the evening resting as much as possible. You may return to your normal activities the day after the procedure, including returning to work.

What are the risks?
The most common risk is a spinal headache. This happens when the needle passes through the spinal sac and can result in leakage of spinal fluid. This is usually treated with lying in a flat position and high fluid intake. Rarely, spinal headaches lasting more than a few days can be treated with a small procedure called a “blood patch”.

Another risk, though very small, is the injection of the medication into one of the tiny blood vessels in the spinal canal. This can result in serious complications such as seizures, cardiac arrest and even death. Fortunately, these complications are quite rare.

Other rare complications include infection, bleeding into the spinal canal (epidural hematoma), loss of bladder control, and injury to a nerve with the needle.

Who should not have an ESI?
The injection of a steroid anywhere in the body can cause a significant increase in the blood sugar level. Diabetics are very sensitive to steroids and should have them administered with caution.
Steroids also decrease the body’s ability to fight infection. Thus, any person with an active infection should not take a steroid medication until the infection has been cleared completely.

Additionally, some patients may have anatomic abnormalities or have had previous back surgeries which may not allow the needle to pass into the spinal canal.

Medications that result in thinning of blood such as Coumadin, Aspirin, Plavix, and many anti-inflammatories, need to be discontinued for five to seven days before the injection. Check with your doctor regarding specific drugs you may be taking.