

## Patient Education Epidural Steroid Injection

### **Dear Patient:**

Your doctor has scheduled you for an epidural. An epidural steroid injection, or ESI, is an injection of a long lasting steroid (cortisone) into the epidural space. The epidural space is an area which surrounds the spinal canal and the nerves coming out of the spinal cord. The actual medication injected is a solution of lidocaine (a local anesthetic), normal saline (used for volume), and Depo-Medrol (the steroid).

### **Purpose of the Injection:**

The purpose of the injection is to reduce inflammation and/or swelling of nerves in the epidural space. In turn, this may reduce pain, tingling, numbness, and other symptoms caused by nerve inflammation.

### **Length of Procedure:**

The actual injection will take a few minutes, but you need to plan on being at the hospital for 1 ½ to 2 hours. This allows time for registration, discussion of the procedure, any questions you may have, performance of the injection, and a short recovery period.

### **The Injection:**

The injection involves inserting a needle through skin and muscles between the bones of the back. There is some minor discomfort involved, but the skin and muscle are numbed with a local anesthetic prior to actual injection. This may burn, but should not be painful. You will feel strong pressure but no pain. Most patients receive an IV with intravenous sedation which makes the procedure easy to tolerate. The amount of sedation given depends upon the patient and how they tolerate the procedure.

### **Results of the Injection:**

Immediately after the injection, you may feel that your legs are slightly heavy and may feel numb. Also, you may notice that your pain may be gone or lessened. This is due to the local anesthetic injected with the steroid. This will last only for a few hours as the effect of the anesthetic wears off. Your pain will return and you may have a sore back for a day or two. This is due to the mechanical process of the needle insertion as well as initial irritation from the steroid itself.

You should start noticing pain relief starting around the 3<sup>rd</sup> to 5<sup>th</sup> day as the cortisone begins working. The effect of the cortisone can last for several days to a few months. It is very difficult to predict if the injection will help you or not. Generally speaking, the patients who have sciatica pain (pain that radiates down your leg) respond better to the injections than the patients who have only back pain. Similarly, the patients with a recent onset of pain may respond much better than the ones with chronic pain. Also, the patients with back pain from bony abnormalities may not respond adequately.

**After the Injection:**

Following your injection, you should have someone drive you home. You cannot drive for 12 hours after sedation is given. We advise you to take it easy for a day or so after the procedure. Avoid bending and lifting for a few days. Avoid a tub bath for 24 hours to reduce the chance of infection. You may return to work as tolerated unless otherwise instructed by your doctor. It is not unusual for you to have a sore back after the injection. You may take ibuprofen unless you are allergic to it.

If the first injection does not relieve your symptoms in one to two weeks, the doctor may recommend for you to have one or two more injections. Generally, we do not perform more than three injections in a six month time period. The medication injected will last for about six months. If three injections have not helped you, it is very likely that you will get no benefit from more injections. Also, giving more injections will increase the likelihood of side effects from the cortisone.

**Risks and Side Effects:**

Generally speaking, this procedure is safe. However, as with any procedure there are risks, side effects, and the possibility of complications.

Side effects from the spinal puncture may include:

- Pain—the most common side effect, but is temporary
- Headaches
- Infection
- Bleeding
- Possible blood clot formation inside the epidural space with nerve damage
- Drug reactions
- Loss of sensation
- Worsening of symptoms, etc

Side effects from the cortisone may include:

- Weight gain
- Water retention
- Increase in blood glucose (mainly in diabetics)
- Suppression of the body's own natural production of cortisone

**Contraindications:**

You should not have this procedure if:

- you have any allergies to any of the medications that are to be injected.
- you are on a blood thinning medication such as coumadin, heparin, or lovenox.
- you have an active infection.
- you have an increased temperature.
- you have a low platelet count.