

## **Selective Thoracic Nerve Block and Transforaminal Epidural Steroid Injection**

### **What is the purpose of a selective thoracic nerve block and steroid injection?**

The purpose of the injection is twofold: 1) to help determine the origin of your pain and 2) for the relief of back pain and/or chest wall pain.

A selective nerve block deposits medication in the region of one nerve only and is usually performed when your symptoms seem related to a problem with a single nerve. It will help assess which nerve is specifically responsible for your symptoms.

### **What can I expect during the procedure?**

You will lie on your stomach. The area around the mid to upper back will be cleansed with an antiseptic to decrease the chance of infection. The skin will be numbed with a local anesthetic. Next, using fluoroscopic (x-ray) or CT guidance, a thin needle will be passed through the skin and placed next to a single thoracic (mid to upper back) nerve. The position of the needle is checked using x-ray dye and then a steroid medication and local anesthetic will be injected slowly. The procedure takes about 30 minutes or longer if multiple levels are treated.

### **What medications are being injected?**

Since the procedure is both diagnostic and therapeutic, two medicines are injected:

1. A **local anesthetic** (usually bupivacaine) lasts about 6 hours and provides the physician with diagnostic information regarding whether or not you have pain relief immediately following the procedure. After the local anesthetic wears off, your pain may return temporarily.
2. A **steroid** (usually methylprednisone) decreases inflammation that may be irritating the nerve causing your pain. If the steroid is going to help, it will begin 24-48 hours after the injection and its effect may continue for several days, weeks, or months, resulting in elimination or reduction of your pain.

### **Is the procedure painful?**

The procedure is uncomfortable, but not painful. The discomfort occurs because the needle is placed very close to the nerves, and this can irritate them, resulting in the very same symptoms for which you are being treated.

During the injection, you may feel mild pressure and/or mild tingling or cramping in your mid to upper back, chest wall, or belly. These sensations are normal.

### **How long does the procedure take?**

Your appointment takes approximately 75 minutes from the time you arrive at the department until the time that the procedure is completed. Immediately after the procedure, the radiologist may want you to stay for up to one hour in the radiology department for observation, but this is infrequent.

### **What are the risks of the procedure?**

Complications that may occur during these procedures include: temporary increased pain after the procedure, puncture of the spinal sac or lung lining, nerve or spinal cord injury (rare), and arachnoiditis (scarring of the nerves, a rare complication). Puncture of the spinal sac usually presents no problems, except that you may have to be observed a few hours after the procedure or the procedure may have to be terminated and rescheduled in 1-2 weeks to allow the sac to heal. Puncture of the lining around the lung will require observation in the department and possible additional procedures.

The injection may cause temporary arm or leg weakness.

On rare occasions, patients will have a bad reaction to the contrast dye used which contains iodine. Tell your doctor about any allergies you have.

Bleeding and infection are risks of any invasive procedure. Tell your doctor if you take any blood thinners.

### **What happens after the procedure?**

You will need someone to drive you home. The local anesthetic injected near the nerves can result in temporary headache, lightheadedness, dizziness, nausea, and weakness making it unsafe to drive. In some patients, the steroid used may cause difficulty sleeping and/or facial flushing for a few days.

You may resume normal activity as tolerated but should limit your activities to those which you could do prior to the procedure. Overexertion may lead to injury.

### **What about other medications I am taking?**

You should talk to the doctor who prescribed any blood thinning medication before resuming it.

If you are diabetic, increases in your blood glucose may occur for several days and you should monitor this closely. Talk to the doctor who treats your diabetes before changing any of your medications.

You may continue taking your other pain medications after the procedure, if necessary.

### **How long does it take before I start feeling better?**

Relief of your back pain may start shortly after the procedure (effect of the anesthetic), may be delayed for several hours, or may be gradual over the next two weeks (effect of the steroid). In rare cases, the pain may get slightly worse before it gets better. There may also be mild soreness at the procedure site for a day or two.

In some patients, a series of injections are necessary for optimal pain relief.

### **How often can this procedure be performed?**

There are no strict rules about the frequency of injections. Your doctor and we will consider your case individually and determine if additional injections would be beneficial to further decrease inflammation and help your pain.

### **Where can I get additional information regarding this procedure?**

Ask your doctor or contact **Orthopedic Imaging Center** at **210-617-9100**.

To schedule, please call our offices: 210-617-9000