



# Facet Joint Injections

Facet joint injections link the bones of the spine together in the posterior or back part of the spine. Two facet joints are present at each spinal segment. They are named after the spinal bones that they connect. For example, in the neck or cervical spine the facet joint between cervical body #5 and cervical #6 are called C5-6. Likewise, in the lower back the facet joints between lumbar body #5 and the sacrum are called L5-S1. Because there are two joints per level, there is a right and left joint.

## **What is the function of the facet joints?**

The facet joints are important in restricting the motion of the cervical and lumbar spine, but they also allow twisting, flexion, and extension motions.

## **Why do facet joints cause pain?**

Facet joints are possible sources of neck pain and lower back pain. The facet joint is innervated by a small nerve that branches out from a spinal nerve. Facet joints have been demonstrated to cause pain in studies in which healthy volunteers were subjected to injections of normal saline into the joint. Trauma and arthritic changes can cause the release of pain generating substances that sensitize nerve endings located in the joint.

## **What are some of the signs and symptoms of facet joint pain?**

For patients with facet joint pain from the lower back, complaint usually consist of pain or tenderness in the lower back slightly over to one or both sides, pain with lower back extension, pain with twisting, and radiation of pain to the buttocks or back or front of the thighs.

For patients with facet joint pain from the neck, complaints are typically based on the segment or level involved. Depending on the level involved, patients may have neck pain, headaches, shoulder pain, or scapular pain.

### **Does an x-ray or other test determine whether or not a facet joint is causing pain?**

X-rays do not determine whether a facet joint is causing pain. However, x-rays may point out abnormalities such as osteoarthritis that may be significant in causing pain. A series of diagnostic blocks with local anesthetic are the only way to reliably determine whether the fact the facet joints are a source of pain.

### **What is a facet joint injection?**

A facet joint block involves the injection of a substance into or next to the facet joint. Typically, in a diagnostic block, local anesthetic is used. In most cases, a corticosteroid is also injected. Radiographic control is used to accurately and safely place the needles at each suspended point. The purpose of facet joint blocks is twofold. Initially, it is a diagnostic block. If the patient receives 75% or greater pain relief for at least 2 hours, there is an increased likelihood that the facet joint is important in the patient's pain syndrome. The block is then repeated during a second later visit to confirm the diagnosis. The second purpose of the facet is to reduce pain. Corticosteroids can help reduce the pain secondary to inflammatory substances that sensitize nerve endings.

### **Are facet joint blocks safe?**

Yes. The risks of facet joint blocks are very low with the use of the z-ray control. Patients may experience some small amount of infection, or bleeding, is extremely rare.

### **Do the injections hurt?**

Patients undergoing facet joint infections all receive local anesthetic to anesthetize the skin and deeper tissue. The patients may elect to receive intravenous sedation consisting of a sedative and/or a narcotic medication.

### **How long does it take for the injections to work?**

Typically, the local anesthetic will work within 10 minutes and last up to two

hours. The corticosteroid usually takes longer for pain reduction. It usually takes anywhere from 1-5 days for pain relief to occur when the pain is coming from the joint.

### **When can I resume normal activities following the block?**

Most patients can resume normal activity the next day. In some cases, patients require an additional day.

### **What if I don't get any relief from the facet joint injections?**

If you don't get any relief from the facet joint injections, it is unlikely that this is the source of your pain. You should then consider with your physician other possible sources of your pain. This may include other diagnostic blocks or imaging studies.

This procedure takes 15-30 minutes. You will be asked to lie in a prone position (face down) on a table in the fluoroscopy suite. Your back will be cleansed with an antiseptic (usually iodine) solution and the area will be numbed. Your physician will use fluoroscopy (x-ray) to guide the placement of a thin needle to the area of a group of nerves, or in the joint itself, that cause pain of facet syndrome. After correct needle placement is confirmed by x-rays, a small amount of local anesthetic and steroid will be injected.

Due to the effects of certain medications, your driving reflexes may be impaired. You will need someone to drive you home after the procedure. You should not eat or drink anything before this procedure. Please make the necessary arrangements.

**PLEASE NOTIFY THE NURSE IF THERE IS A CHANCE THAT YOU MAY BE PREGNANT!**

## FREQUENTLY ASKED QUESTIONS

### **Q. Why is a facet block performed?**

**A.** A facet block may be done if you have facet syndrome. Facet syndrome may manifest itself by focal tenderness over the facet joint, or by chronic back pain that may or may not radiate elsewhere. Often, patients with facet syndrome or facet arthritis may have normal radiographs (x-rays, CT scan, and MRI). Your doctor may need to diagnose facet syndrome by performing this block.

### **Q. Are there any special preparations/restrictions?**

**A.** You should not have anything to eat or drink 8 hours prior to the procedure. You will not be able to drive home after your procedure.

### **Q. How will I feel after the procedure?**

**A.** You may experience numbness and/or relief from your symptoms for up to 6 hours after the injection. Your usual symptoms may then return and may possibly be worse than usual for a day or two. If there is an inflammatory source of pain, you will improve from the steroid in 1-5 days time.

### **Q. When will the pain relief medication take effect?**

**A.** While these injections may provide short-term relief in your pain, they are mainly to help us decide whether or not this certain area of your back is responsible for a large portion of your pain. If after two facet blocks the physician decides that you responded appropriately, he will then offer a radiofrequency neurotomy procedure on your back in this area which will actually coagulate these nerves in the facet joints. This will give a more long-term result by interrupting the nerve supply, improving your pain for 6 months to 2 years.

### **Q. Are there any side effects?**

**A.** Possible side effects of the steroid medications include headaches, mild fluid retention, increased blood sugar levels, hiccups, flushing, palpitations, and difficulty sleeping. These side effects occur in only about 5% of patients and commonly disappear within 1-3 days after the injection. Muscle spasm from needle placement is temporary and can be addressed with massage, ice/heat, or muscle relaxants.