



## **Institute for Low Back and Neck Care**

*Physicians dedicated to relieving pain  
and improving function*



For any questions, please call your  
physician's medical secretary at  
952-814-6600.

### ***Lumbar***

## **Medial Branch Blocks**

*(Or facet nerve injection)*

## Introduction

At times it is difficult for the doctor to determine specifically what is causing the pain in a patient's low back and legs.

Diagnostic injections can help the doctor to identify the cause of the pain; therefore, making the plan of treatment more focused and more effective. Finding a specific diagnosis leads to better treatment and better outcomes for the patient.

### The Facet Joints and Medial Branch Nerves

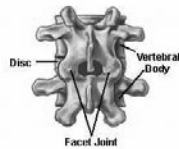
The facet joints are the small joints between the vertebral segments on both sides of the spine. Each vertebrae has two sets of facet joints. One pair faces upward and one pair faces downward. These joints provide stability and control for bending and twisting.

Pain in the low back with a less specific, vague aching in the legs (one or both) may be caused by "wear and tear" arthritis in the facet joints.

The nerves that supply the facets are called

medial branches. These nerves carry the pain signals to the spinal cord where the signals travel to the brain. The brain then interprets the signals, and you feel the pain.

Posterior Spinal Segment



## The Procedure of the Injection

A local anesthetic is used to temporarily try to block these nerves from sending the pain signals on to the brain. If you have pain due to facet joint arthritis, you may feel relief of that pain for a few hours.

If significant pain relief is obtained through this temporary block, then you may be a candidate for a more long-lasting block of the nerves called **medial branch radiofrequency neurotomy**. Medial branch blocks are often used as a test to determine if radiofrequency neurotomy may help reduce your pain.

## The Procedure

The patient is placed in the prone (laying face down) position with a pillow underneath the abdomen. The skin of the low back is sterilely prepared. Using fluoroscopic (x-ray) guidance, the bony landmarks are viewed. The skin is anesthetized. Under fluoroscopic (x-ray) guidance, thin needles are advanced to the appropriate area for medial branch blockade. A small volume of contrast solution is injected to prove that the medication will stay in the appropriate area. Then, a small volume of long-acting anesthetic is injected. The patient is cared for in the recovery area for 20 minutes.

## Preparing for Medial Branch Blocks

- **For diagnostic injection, you should have some pain at the time of your procedure.** If you are typically pain-free after taking pain medication, please do not take these medications for 4-6 hours before the injection. In the event that you do not have pain on the day of the diagnostic injection, the procedure may need to be rescheduled.
- There are no special dietary instructions for this procedure.
- While the procedure may take less than 30 minutes, you should allow for at least 1-2 hours at the procedure center.
- If you are taking prescription blood thinners such as Coumadin (warfarin), Plavix (clopidogrel), and Ticlid (ticlopidine), please inform your doctor's medical secretary. These medications will need to be stopped before the procedure, but only after you receive permission from the doctor who is prescribing these medications.
- Also, inform your doctor's medical secretary if you are on high dose of aspirin (more than 2 per day).
- Inform your doctor's secretary if you have a pacemaker.
- If you develop a fever, night sweats, or an active infection, your procedure will need to be rescheduled. Please contact our office at **952-814-6600** immediately to inform us of your change in condition.

## After the Injection

Follow the specific instructions given to you by the nurses at the procedure center.

- Resume activity as tolerated.
- After the anesthetic wears off, you may have some soreness at the injection sites for 1 to 2 days from the needle insertion.
- Observe for any signs of infection including redness and warmth at the injection site, increasing pain, swelling, drainage, chills, night sweats, fever above 100° F. Report any signs of infection or other unusual symptoms.
- Keep a record of your pain and symptoms in the immediate hours after the injection and report your results as instructed by the nurses at the procedure center.

## Potential Risks of Medial Branch Blocks

The risks are quite minimal, but are similar to any procedure involving a needle placement. These include, but are not limited to:

- Allergic reaction to the anesthetic or x-ray dye (be sure to inform us before the injection if you have any known allergies).
- Infection.
- Needle injury to a blood vessel which may bleed.
- Needle injury to a spinal nerve which may cause numbness or muscle weakness (very rare).
- Irritation of the injected structure, which could cause worsening pain.
- Inability to complete the injection due to technically or anatomically not being able to place the needle at the desired target.