



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.

Cervical or Thoracic

Medial Branch Blocks

(Or facet nerve injections)

Introduction

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

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.

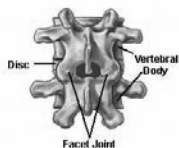
The Facet Joints and Medial Branch Nerves

The facet joints are small joints between the vertebral segments on the back of the spine. These joints provide stability. The cervical facet joints guide motion in the neck and the thoracic facet joints guide motion in the mid-back. Pain in the neck, upper back, and shoulders 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 are carried to the brain. The brain then interprets the signals, and you feel the pain.



Posterior Spinal Segment



The Purpose of the Injection

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

If significant pain relief is obtained through this temporary injection, 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 two pillows under the chest and a small pillow under the forehead. The skin on the back of the neck or upper back is sterilely prepared. Using fluoroscopic (x-ray) guidance, the appropriate levels for medial branch blockade are viewed. The skin is anesthetized. A thin needle is then advanced under x-ray guidance to the appropriate region for the block. 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-lasting anesthetic is injected. The patient is cared for in the recovery area for 30 minutes.

Preparing for the Medial Branch Block

- **For diagnostic injections, you need to be in pain at the time of the procedure.** If you are typically pain-free after taking pain medications, 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 a diagnostic injection, the procedure may need to be rescheduled.
- Occasionally patients need mild sedation for this procedure. For this reason **please do not eat or drink for 6 hours before the procedure.** You may take medication with a small sip of water. *If you take medication for **high blood pressure**, be sure to take it the day of the procedure. If you are on medication for **diabetes**, please call your family doctor for instructions on how to adjust your medication.*
- While the procedure may take less than 30 minutes, you should allow for at least two hours at the procedure center.
- You need to arrange for a driver to be present for the entire time you are at the facility. If you do not have a driver with you, your procedure may have to be rescheduled.
- If you are taking prescription blood thinners such as Coumadin (warfarin), Plavix (clopidogrel bisulfate), 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 doses of aspirin (more than 2 a day).
- Please 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 site for 1 to 2 days from the needle insertion.
- For discomfort, apply ice packs to the area for 15 minutes several times a day.
- Do not soak in a tub for 24 hours after the procedure. You may take showers.
- 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 contrast 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 pain or lasting injury.
- 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.