



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 Radiofrequency Neurotomy

(RF Neurotomy, Rhizotomy)

Introduction

Your physician has determined that your low back or leg pain may be caused by degenerative changes in your facet joints. Lumbar medial branch radiofrequency neurotomy (RF neurotomy) is recommended to try to decrease that pain.

The medial branch nerves that supply the facet joints carry pain signals to the spinal cord where the signals then travel to the brain. The brain interprets the signal, and you feel pain.

The Purpose of RF Neurotomy

RF neurotomy is designed to block some of the nerves from sending pain signals without changing the back itself or causing lower extremity weakness.

This procedure may decrease pain from the facet joints on a long-term basis. It does not correct the underlying problem itself.

It is most important to understand that RF neurotomy does not take away all feeling from the spine, so it is possible that new problems or advancement of an old problem may still produce discomfort. Also, it may become clear after the procedure that you may be experiencing pain from other areas as well.

The amount and duration of pain relief varies for each individual. The pain relief can be as short as 3 months or can last years, but typically the relief lasts for 6-12 months.

The Procedure

Prior to the procedure, a peripheral IV is placed. This is utilized for mild sedation over the course of the procedure. In the prone (laying face down) position, with a pillow underneath the abdomen, the skin over the lumbar region is sterilely prepared and draped. After numbing the skin entry points, radiofrequency cannulas (needles) are advanced under x-ray guidance to the specific region where the medial branch nerve lies. Tiny electrical signals are then sent which cause the muscles of the back to twitch involuntarily. These signals are used to confirm that the needles are perfectly placed and not near the nerve roots that travel into the legs. Once placement is confirmed, a small amount of numbing medication is injected so that the cauterization of the nerves is painless. The medial branch nerves

are then lesioned at the specific levels. A small amount of steroid solution (usually triamcinalone) is sometimes injected to reduce inflammation after the procedure. The patient is cared for in the recovery area for at least 30 minutes before being discharged home.

Preparing for the Procedure

- **You should have no solid foods for 6 hours before your procedure.** You may have clear liquids up to 2 hours before your procedure. Example: water, broth, clear fruit juices such as apple, cranberry and grape juice. These juices should not include pulp. Tea, black coffee with no cream and carbonated beverages are also allowed. Please take your regular medications the day of your procedure, especially any **heart or blood pressure** medications. If you are on medication for **diabetes**, be sure to take it the day of the procedure. No gum for 2 hours before the procedure.
- While the procedure usually takes less than an hour, you will need to allow for at least 2-3 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 use a taxi or volunteer ride service, you still must have a responsible adult with you in order to help take care of you after your sedation procedure.
- If you are taking prescription blood thinners such as Coumadin (warfarin), Plavix (clopidogrel bisulfate), or 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.
- Inform your doctor's medical secretary if you are on high doses of aspirin (more than 2 per day).
- **Please inform your doctor's medical 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.

- Plan to be quiet for 1-2 days after the procedure. You may resume activity as tolerated by your level of comfort.
- Keep the skin puncture sites clean and dry. Remove any bandages the next day and keep the skin open to air.
- 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. Thereafter, you may soak in a warm tub or under a warm shower 2-3 times per day for comfort. After each soak, pat the overlying skin dry with a clean towel.
- 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.

You may experience an increase in pain for up to 2 weeks after the procedure. This discomfort should gradually disappear as you heal. After the procedure soreness is gone and you begin to resume normal activity, you will be able to evaluate any improvement in your pain. Your pain relief benefits from RF neurotomy may be not fully known until 2-4 weeks after the procedure.

Potential Risks of RF Neurotomy

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 medications used 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 numbness, pain 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 desire target.

Possible Side Effects of the Steroid

Possible side effects include facial flushing, fluid retention, insomnia, low-grade fever, temporary changes with menstruation, and headache. These side effects usually are minimal and resolve 1-3 days after the procedure. If you have diabetes, your blood sugars may be temporarily elevated.