

Thoracic Medial Branch Radiofrequency Ablation (Neurotomy)

Understanding your procedure.

## Introduction >>

Radiofrequency ablation is a therapy that uses radio waves to create an electrical current through the body. This current delivers heat (80 degrees Celsius for 120 seconds) to targeted nerves and tissues. This non-surgical technique is used to target sources of pain in the back and neck.

Each spinal segment, or vertebrae, is connected to the other by a small joint, these are called facet joints. The cause of this inflammation or irritation is often arthritis. Radiofrequency ablation or neurotomy, is used to create a heat lesion on the medial branch nerve. This nerve is responsible for sending a pain signal to the spinal cord and brain from irritated or inflamed facet joints. The heat lesion prevents this nerve from sending a pain signal, and often significantly reduces a patient's pain for an extended period of time.

# Goal of the injection >>

The radiofrequency ablation procedure (RFA) is a non-surgical, minimally invasive technique that is performed in an outpatient setting. RFA is very similar to the medial branch block procedure, which is used to diagnose pain coming from the facet joints. The goal of the radiofrequency procedure is to provide at least 50% relief of chronic upper back pain (national average result) for 6-12 months duration, often times even longer.



CUYUNA REGIONAL MEDICAL CENTER Interventional Pain Management

(218) 545-1001 or (844) 815-7246 cuyunamed.org Thoracic Medial Branch Radiofrequency Ablation (Neurotomy)

#### Insurance requirements >>

Insurance companies have a series of requirements that must be met, prior to their approval of the radiofrequency ablation procedure. These may vary between insurance companies, however; they commonly include:

- Physical Therapy often a minimum of 4 weeks in duration
- Completion of medial branch nerve diagnostic block procedure with adequate relief for a minimum of 3 hours duration. Most insurance companies require two diagnostic block procedures.
- Due to the proximity of vital structures in the neck, such as nerves and blood vessels, the radiofrequency procedure may be performed <u>on one side of the body at a</u> <u>time</u>. This is for safety reasons, and minimizes potential adverse outcomes and complications.

# The procedure >>

You will likely receive IV sedation for this procedure. A nurse will typically start an IV in the pre-op area prior to the procedure. You are then accompanied into a sterile procedure suite, and asked to lie face down on the exam table. Using X-ray guidance, the doctor places a small needle on each facet joint, near the medial branch nerve. After the nerve is anesthetized with local anesthetic, an electrical current is used to create the ablation, or heat lesion. This nerve, once treated, will not be able to send as strong of a pain signal to the brain as it did before, giving you relief of your chronic upper back pain.

Following the injection, you will be cared for in the recovery area for a brief amount of time and then discharged home.

#### IF YOUR PROCEDURE INCLUDES SEDATION >>

- You should have no solid foods for 8 hours before the procedure.
- You may have clear liquids up to 2 hours before your procedure. Examples of these clear liquids are: water, broth, clear juices with NO pulp, tea, coffee WITHOUT cream. Carbonated beverages are NOT allowed.
- <u>No gum chewing for 2 hours before your</u> procedure.
- No candy, throat lozenges, or mints.
- A nurse will call you before your procedure to review your medications and make recommendations as to what medicines you should take before your procedure.



Failure to comply with these instructions may result in cancellation and rescheduling of your procedure

#### Understanding your procedure.

#### Potential Risks of the procedure >>

Radiofrequency ablation procedures are considered safe, non-surgical, minimally invasive treatments. As with all medical procedures, there are associated risks and sideeffects that may vary between each patient. These rare but potential risks are:

- Pain at the injection site
- Infection. In very rare instances (less than 1%), minor infections can occur
- Increased pain or worsening symptoms.
- Collapsed lung (pneumothorax). This is specific to thoracic RFA due to the close proximity of the lung in this area.
- Post-ablation neuritis, which is an irritation of the nerves being targeted.
- Stroke
- Bleeding. You may suffer bleeding from undergoing procedures, especially while on blood thinning medications.
  Please notify us if you are taking any of the following blood thinning medications:
  Warfarin (Coumadin), Plavix (Clopidogrel), Aspirin, Xarelto (Rivaroxaban), Heparin, Lovenox (Enoxaparin), Brilinta (Ticagrelor), or any others not listed.
- Nerve or spinal cord damage. In extremely rare instances, a patient may suffer nerve or spinal cord damage from direct trauma from a needle. This could potentially result in permanent nerve damage or paralysis.
- Allergic reactions to medications. The commonly used medications in this procedure include: Lidocaine,
  Bupivacaine, Ropivacaine, IV contrast dye, and corticosteroid (cortisone).
- Inability to complete the injection due to technical or anatomic difficulty.

#### **CAUTION:**

It is against the law to drive while under the influence of sedation medications. If you receive sedation for your procedure, we do require you to have a responsible driver available for transportation home.

# When should I call for help >>

If you develop fever, chills, weakness that lasts longer than 24 hours, chest pain, shortness of breath, or severe pain that is different from your typical back, neck or joint pain – please call your doctor's office immediately or go directly to the ER.

## After the procedure >>

Follow the specific instructions given to you by the nurses at the time of discharge from the recovery area:

- Do not drive or operate heavy machinery for 24 hours after your procedure, <u>if you</u> <u>received sedation</u>
- Resume activities as tolerated, understanding you may be sore for 7-10 days
- It is not uncommon for the patient to not experience relief of their chronic upper pain for up to 7-10 days after the procedure
- Do NOT soak in a bathtub or lake for 24 hours after the procedure. You <u>may</u> shower.
- You will receive a phone call from a clinic nurse, the following day to check in and see how you are recovering.



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Office hours: 7:30 a.m. - 4:00 p.m., Monday -Friday