

Radiofrequency Neurotomy

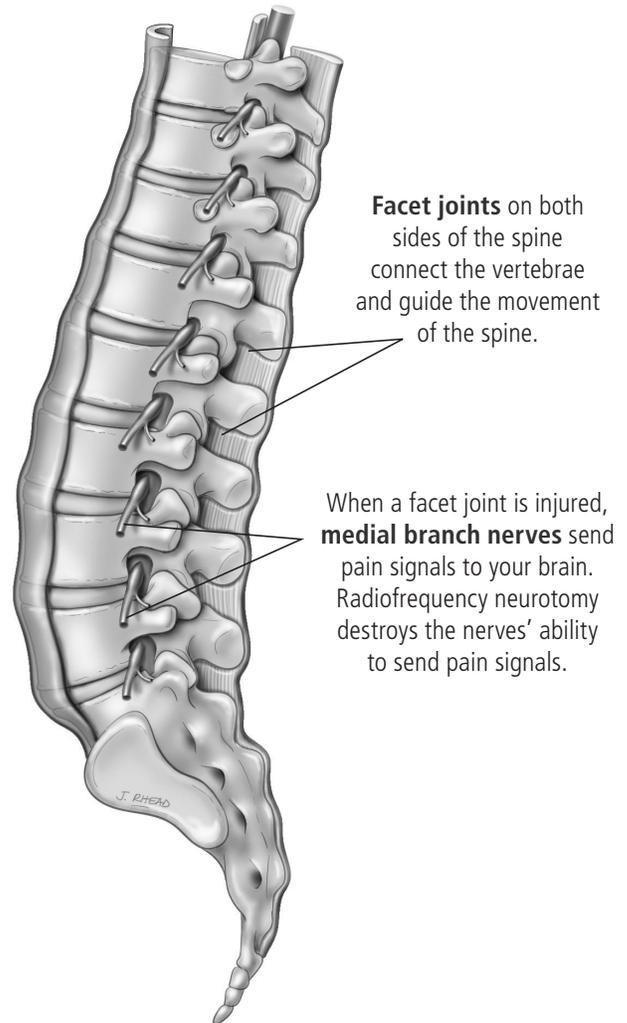
What is it?

Radiofrequency neurotomy is a procedure to disable a spinal nerve so it can no longer send pain signals to the brain. This is done by using radiofrequency energy to heat the area around a medial branch nerve. These nerves are located near the facet joints, the joints on the back of the spine where two vertebrae come together. The heat disrupts the nerve's ability to transmit pain.

Why do I need it?

Your doctor may recommend radiofrequency neurotomy to relieve ongoing neck, back, or hip pain that comes from a facet joint. If physical therapy or medication have not helped the pain, the doctor can do a diagnostic injection (shot) to see if the pain is coming from a facet joint.

The diagnostic injection is called a medial branch nerve block. The doctor injects a local anesthetic (nerve block) onto a medial branch nerve near one or more facet joints. This is meant to stop the pain for a short time. If you feel pain relief from this injection, it's a good indication that the pain may be coming from the facet joint. Your doctor will usually perform two diagnostic injections on separate days. Your doctor may then recommend radiofrequency neurotomy.



Potential benefits	Risks and potential complications	Alternatives
<ul style="list-style-type: none"> • Can provide up to 80% pain relief, lasting up to one year • Less invasive, with shorter recovery time than surgery • Does not require hospital stay 	<ul style="list-style-type: none"> • No pain relief • Need to repeated as often as every year • Pain recurring in other places • Injury to larger nerves with risk of sensory or motor change • Increased pain (rare) 	<p>Radiofrequency neurotomy is used after patients have experienced pain for several months and have already tried other approaches, such as:</p> <ul style="list-style-type: none"> • Oral medications • Physical therapy <p>If radiofrequency neurotomy does not relieve your pain, your doctor may recommend surgery.</p>

How do I prepare for the procedure?

There are a few things you can do to make the procedure go better:

- **Medication changes.** You may be asked to stop or change the dose of certain medications for several days before the procedure. Always ask your doctor before stopping any medications.
- **Medication list.** Bring a list of all your current medications to the hospital. Be sure to mention everything, including over-the-counter medications and vitamins.
- **Food and drink.** Do not eat or drink for 6 to 8 hours before the procedure.

What happens during?

You will remain awake during the procedure. This will allow you to tell the doctor when you feel the pain go away. Your procedure will include the following:

- **Position.** You will lie face down on an operating table.
- **Sedative.** You may be given a mild sedative to help you relax.
- **Local Anesthetic.** You will be given a local anesthetic to numb your skin near the injection site.
- **Positioning the needle.** Your doctor will insert a thin needle near the facet joint that is causing the pain, using an x-ray to help position the needle in the best place. Each joint has two medial branch nerves, so each joint treated will have two needle positions.
- **Initial electric pulse.** Your doctor will insert an electrode through the needle and send a weak electric pulse. This will help your doctor know if the needle is in the best position. You may feel some twitching. Your doctor may ask you questions about what you feel that will also help position the needle.
- **Pain medication.** Your doctor will inject more pain medication close to the nerves being treated to help with any discomfort.
- **Radiofrequency pulse.** Your doctor will use radiofrequency energy to disable the medial branch nerve. The procedure will be repeated at each needle position.

What happens after?

- You may have your vital signs (heart rate, blood pressure, breathing rate) monitored for up to 30 minutes after the injection.
- You will not be allowed to drive home. Someone will need to drive you.
- You may feel sore from the injection for 1 to 4 days.
- Your back may feel numb, weak, or itchy for a couple of weeks.
- Your pain may flare up and feel worse for a few days before it starts to feel better. It may take 3 to 4 weeks to feel the full pain relief of the neurotomy.
- Be SURE to follow up with your doctor in one to two weeks. Your doctor needs to know how well the procedure worked and if you need additional treatment.

When will I feel relief — and how long will it last?

About half of people who have radiofrequency neurotomy feel pain relief, and it can take up to 4 weeks to feel it. The pain relief should last 6 to 16 months. After that, the treated nerves can begin to grow back, and the pain may or may not return. If the pain does return, physical therapy and greater muscle strength around the joint may make it less than it was before the procedure. If necessary, another radiofrequency neurotomy can be done.

When should I call the doctor?

Once you go home, you should gradually start to feel better. Call your doctor if you're concerned about your progress, or if you have any of these symptoms:

- Severe back pain
- Fever or chills
- Increase in pain that is not getting better within two weeks