

Radiofrequency Ablation (RFA)

Patient Information

What is Radiofrequency Ablation?

Radiofrequency ablation (RFA), also called radiofrequency neurotomy or rhizotomy, is a minimally invasive procedure used to treat chronic neck or back pain arising from the facet joints or sacroiliac (SI) joints. Also can treat shoulder (suprascapular nerve, hip (branches of obturator/femoral nerves), and knee (genicular nerves).

During the procedure, a specialized needle is placed next to the small sensory nerves that carry pain signals from the affected joints. Heat generated by radiofrequency energy temporarily interrupts these pain signals while leaving the muscles and strength unaffected.

The goal is to provide longer-lasting pain relief and improve your ability to participate in normal daily activities.

Why is this procedure performed?

Your healthcare provider may recommend radiofrequency ablation if:

- You have chronic neck or low back pain originating from the facet joints.
- You have pain from the sacroiliac (SI) joint.
- You experienced significant temporary pain relief from diagnostic medial branch blocks or SI joint lateral branch blocks.
- Conservative treatments such as medications, physical therapy, or injections have not provided lasting relief.

Common symptoms include:

- Neck pain
 - Low back pain
 - Pain that worsens with standing, twisting, or extending the spine
 - Localized pain without significant leg or arm numbness
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Before Your Procedure

Please let us know if you:

- Have diabetes
- Are pregnant or think you may be pregnant

- Have an active infection or fever
- Have a defibrillator, spinal cord stimulator, or implanted electrical device
- Have allergies to iodine, latex, or local anesthetics

Day of the Procedure

Hospital

- Check in on the main floor **1 hour before** your procedure time. Guest Services will escort you to the procedure area.
 - **If receiving sedation:** Nothing to eat or drink for **8 hours** before your procedure. Small sips of water are permitted up to 2 hours beforehand for routine medications.
 - You **must have a driver age 18 or older** who remains at the hospital during your procedure. Uber, Lyft, taxis, or hospital transportation are **not permitted** for patients receiving sedation per hospital policy.
 - **If no sedation is planned:** You may eat normally, and a driver is generally not required.
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What Happens During the Procedure?

1. You will lie on the procedure table.
2. Your skin will be cleaned with an antiseptic solution.
3. Local anesthetic is used to numb the skin.
4. Using live X-ray guidance (fluoroscopy), the physician positions specialized needles next to the target nerves.
5. Small electrical stimulation is performed to confirm proper needle placement. You may feel a tapping or buzzing sensation.
6. Additional numbing medication is administered.
7. Radiofrequency energy is applied for approximately **60–90 seconds** at each nerve to create a small lesion that interrupts pain signals.

The procedure generally takes **20–45 minutes**, although your total visit may last **60–90 minutes**.

What Will I Feel?

You may experience:

- Cold cleansing solution
- A brief sting from the numbing medicine
- Pressure at the procedure site
- Mild muscle twitching or buzzing during testing

- Temporary warmth or aching during treatment

Most patients tolerate the procedure very well.

After the Procedure

You may notice:

- Mild soreness or bruising at the treatment site
- Increased discomfort for several days as the treated nerves heal
- Temporary numbness from the local anesthetic
- Gradual improvement beginning over **2–6 weeks** as the treated nerves stop transmitting pain signals

Activity

For the first 24 hours:

- Avoid strenuous activity.
- No swimming or soaking in a tub.
- Walking and light daily activities are encouraged.
- Resume normal activities the following day as tolerated unless instructed otherwise.

Ice may be applied to the treatment area for 15–20 minutes at a time during the first 24–48 hours to reduce soreness.

Possible Side Effects

Temporary side effects may include:

- Injection site soreness
- Muscle spasms
- Temporary increase in pain
- Mild numbness or tingling
- Bruising

These symptoms usually improve over several days to two weeks.

Risks

Although complications are uncommon, potential risks include:

- Bleeding
- Infection
- Allergic reaction
- Temporary numbness
- Temporary nerve irritation or neuritis
- Weakness (rare)
- Burns to the skin (very rare)
- Lack of pain relief
- Very rare nerve injury

Your physician uses sterile technique and X-ray guidance to minimize these risks.

Frequently Asked Questions

How long does pain relief last?

Pain relief commonly lasts **6 to 18 months**, although results vary. As the treated nerves regenerate, pain may gradually return. The procedure can often be repeated if needed.

Will I feel immediate relief?

Not usually. The numbing medicine may provide temporary relief for several hours. It is common to experience soreness for several days before the benefits of the procedure develop over the next few weeks.

Can the nerves grow back?

Yes. The nerves typically regenerate over time, which is why pain may eventually return.

Is radiofrequency ablation a cure?

No. RFA treats the pain by interrupting nerve signals but does not reverse arthritis or other structural changes in the spine.

When Should I Call My Doctor?

Contact your healthcare provider immediately if you develop:

- Fever greater than **101°F (38.3°C)**
- Increasing redness, swelling, or drainage at the procedure site
- Severe or worsening pain that is not improving
- New weakness in your arms or legs
- Loss of bowel or bladder control

- Difficulty breathing or signs of an allergic reaction

If you experience sudden weakness, loss of bowel or bladder control, or other severe neurologic symptoms, seek emergency medical care immediately.

Contact Us

If you have questions before or after your procedure, or if you develop concerning symptoms, please contact our office during business hours. For severe symptoms or medical emergencies, call **911** or go to the nearest emergency department.

Patient Acknowledgment

I have received and reviewed this educational information regarding radiofrequency ablation. I understand the purpose of the procedure, its benefits, potential risks, and when to seek medical attention.

Patient Name: _____

Signature: _____

Date: _____