

# Radiofrequency Denervation

This handout answers some of the most common questions patients have about radiofrequency denervation. If you have other questions, please do not hesitate to call the Norman Prince Spine Institute at **401-444-3777** (Providence) or **401-845-1190** (Newport).

## What is radiofrequency denervation?

Radiofrequency denervation (RFD) is a procedure used to treat neck and back pain in patients with irritated facet joints. These are the joints in your spine that allow you to bend and twist your back and neck. Daily wear and tear can bother the facet joints and cause you pain.

When you move your back or neck, your irritated joints send a pain signal up nerves to the brain. You feel pain because your brain responds to the signal and tells you that the movement hurts. During RFD, the nerves are heated with radio waves. This damages them and stops them from sending the pain signals. As a result, you will feel less or no pain usually for 6–12 months. You will still be able to move your back and neck, but doing so will hopefully hurt less.

RFD is an option for patients who received good relief from a diagnostic test block (injection of a numbing medication into the area around the facet joints).

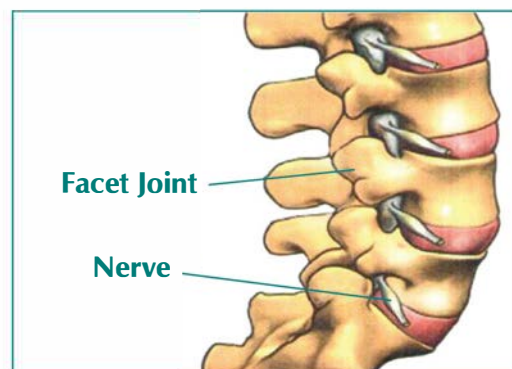
## Do I have to do anything to prepare for the procedure?

Once your procedure is scheduled, we will give you instructions on how to prepare. We may prescribe you a medication that will relax you before and during your procedure.

It is very important for your safety to tell us if you:

- Take a blood thinner (for example, warfarin/Coumadin, Lovenox, or Plavix),
- Take any aspirin products or nonsteroidal anti-inflammatory drugs, such as ibuprofen (for example, Advil or Motrin) or naproxen (for example, Aleve),
- Have a condition that prevents your blood from clotting normally, or
- Have any allergies to latex, local anesthetics, X-ray dye, or seafood.

Please plan to have someone drive you home after your test. **If you do not, your procedure will be canceled.**



## Does the procedure hurt?

Before the procedure begins, we will inject you with a medication called a local anesthetic. This will numb the area that will be treated. You may feel some stinging from the needle or the anesthetic. You may also feel a slight burning sensation when the doctor heats the nerves in your joints. You will be awake for RFD because we will need your feedback throughout the procedure to help us put the needles in the right spots.

## What happens during the procedure?

The procedure is similar to the diagnostic test block that you had. It usually involves the steps below:

1. You will lie on your stomach on the procedure table.
2. Your vital signs (such as your blood pressure and pulse) will be measured. Then the area to be injected will be cleaned and covered with a special sheet. This will keep the area free of germs.
3. The doctor will numb the area with a local anesthetic. Then he or she will inject contrast (a substance that will help highlight the area on X-rays). If you are allergic to contrast, your doctor will discuss your options with you.
4. The doctor will use a special X-ray to help place the radiofrequency needle in the right spot. Then he or she will push a small probe through the needle. The probe will heat the nerves that send pain signals to the brain. This damages the nerves and stops them from sending the pain signals for a while.

The entire procedure takes about 40 minutes to an hour.

## Are there any side effects from the procedure?

Side effects from RFD are rare. The most common side effect is pain where you were injected. You may feel a burning sensation, similar to a sunburn. These side effects may last several weeks.

## How will I feel after the procedure?

- Pain relief from RFD will last much longer than relief from a diagnostic test block.
- Usually, patients feel 60%–80% better for about 6–12 months.
- It may take 4–6 weeks for you to feel pain relief. Continue to take your regular pain medication after RFD as prescribed.
- RFD works better in some people than in others. If you do not have any relief or if your pain gets worse, we will work with you to find the source of your pain and discuss other treatment options. It is also possible that we may repeat RFD.



For more information, please call the Norman Prince Spine Institute at **401-444-3777** (Providence) or **401-845-1190** (Newport).