

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 neck and back. Daily wear and tear can bother the facet joints and cause you pain.

When you move your neck or back, your irritated joints send a pain signal up certain 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 neck and back, but doing so will hopefully hurt less.

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

Preparing for the procedure

Once your procedure is scheduled, we will give you instructions on how to prepare.

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

- Take a blood thinner (for example, warfarin/Coumadin, Lovenox or Plavix);
- Take anything that contains aspirin or an anti-inflammatory drug, such as ibuprofen (for example, Advil or Motrin) or naproxen (for example, Aleve);
- Have a condition that prevents your blood from clotting normally;
- Have any allergies to latex, local anesthetics or X-ray dye; or
- Have an implanted electrical device, such as a pacemaker or defibrillator.

Please plan to have someone drive you home after your procedure. If you do not, your procedure may need to be rescheduled.

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 to expect

The procedure is similar to the diagnostic test block or facet joint injection that you had. It usually involves these steps:

1. You will be taken to a patient waiting area. There we will check your ID band, measure your vital signs (such as your blood pressure and pulse) and ask you some basic questions about your health.
2. Then you will be taken to the procedure room, where the doctor will ask your consent to do the procedure.
3. You will lie on your stomach on a table. Your neck or back will be cleaned and covered with a special sheet. This will help keep the area free of germs.

4. Your doctor will numb the skin over the facet joints with a local anesthetic. This will help prevent discomfort during the procedure.
5. Your doctor will insert the radiofrequency needle. 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 should stop them sending the pain signals for a while.
6. Then your doctor will inject numbing medication and possibly a steroid medication.

Throughout the procedure, your doctor will use a special X-ray to help view the area. He or she may also inject a substance called contrast, which will help highlight the area on X-rays. If you are allergic to contrast, your doctor will discuss your options with you before the procedure.

The entire procedure takes about 40 minutes.

You will be awake during the procedure and may ask questions at any time.

Possible side effects

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.

After the procedure

- 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.

If you have any questions, please call the Pain Center at 617-754-5450 and ask to speak with a member of the clinical team.