LUMBAR RADIOFREQUENCY DENERVATION (RFD)

For Low Back Pain

A lumbar radiofrequency denervation (RFD) is an outpatient procedure for treating low back, buttock, hip, and groin pain. It is also called lumbar facet thermal coagulation or rhizotomy or radiofrequency ablation. This information sheet will explain what it is. Your doctor can explain if it is for you.

What are lumbar facet joints?
Facet joints connect the vertebrae, the bones of the spine. They help guide your spine when you move. The low back area of the spine is called the lumbar region. It contains five vertebrae.

Facet joints are found on both sides of the spine. Each is about the size of a thumbnail. Lumbar facet joints are named for the vertebrae they connect and the side of the spine where they are found. The right L4-5 facet joint, for example, joins the 4th and 5th lumbar vertebrae on the right side.

Medial branch nerves are found near facet joints. They communicate pain from the facet joint. They tell the brain when facet joints have been injured or are inflamed.

What is lumbar facet joint pain?
You may feel pain if a lumbar facet joint is injured or inflammation. Sometimes it feels like muscle tension. Other times it can be severe pain.

The cartilage inside the joint may be injured. Other times only connecting ligaments or nerves surrounding the joint are injured.

Facet pain also depends on which joint is affected. Lumbar facet joint pain can occur in an area from your low back down to your buttocks, leg or groin. The diagram shows areas of pain usually associated with lumbar facet injuries.

How do I know if I have lumbar facet pain?
If you have pain in one or more of these areas you may have lumbar facet pain.

Common tests such as x-rays or MRIs may not always show if a facet joint is causing pain. The best way to diagnose facet pain is to block the pain signal in a medial branch nerve.

What is a lumbar RFD?
RFD uses radiofrequency energy to disrupt nerve function. When this is done to a lumbar medial branch nerve, the nerve can no longer transmit pain from an injured or inflamed facet joint.
What happens during an RFD?

An RFD may start with an IV (medicine given intravenously) to help you relax and put you into a twilight sleep. A local anesthetic will be used to numb your skin. The doctor will then insert a thin needle near the facet joint. Fluoroscopy, a type of x-ray, will be used to position the needle. The doctor will then check to make sure it is at the correct nerve by stimulating it. This may cause muscle twitching and provoke some of your pain.

Once the needle is properly placed, the area will be numbed. Radiofrequency energy will then be used to disrupt the medial branch nerve. This is often repeated at more than one level of the spine.

What happens after an RFD?

You will be monitored for at least 30 minutes after the RFD. When you are ready to leave, the clinic will give you discharge instructions. Take it easy for the rest of the day and do not drive.

You may feel sore for one to four days. This is normal. It may be due to muscle and nerve irritation. Your back may feel numb, weak, sensitive or itchy for a couple of weeks. Full pain relief normally comes in one to three weeks.

How long can I expect pain relief?

Nerves regenerate (grow) after an RFD, but how long this takes varies. Your pain may or may not return when the nerves regenerate. If it does, another RFD can be done.

This pamphlet is for general education only. Specific questions or concerns should always be directed to your doctor. Your doctor can explain possible risks or side effects.