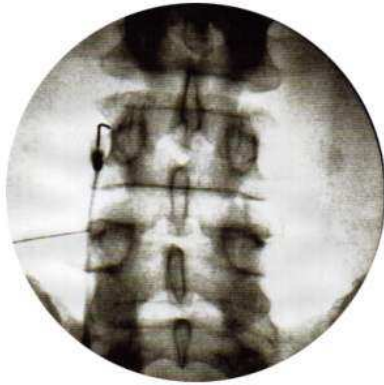


## **Radiofrequency Lesioning**

### **What is Radiofrequency Lesioning?**

Radiofrequency (RF) Lesioning is a procedure using electrical impulses to interrupt nerve conduction on a semi-permanent basis. The nerves are usually blocked for 6 to 12 months.



### **What are the benefits of Radio Frequency Lesioning?**

The procedure disrupts nerve conduction (especially conduction of pain signals) and it may reduce other related symptoms (numbness, tingling, or burning.) Approximately 70-80% of patients will get good block of the intended nerve. This should relieve the pain that the blocked nerve controls. Once a nerve is blocked, it sometimes becomes clear that there is also pain generated from different areas.

### **How long does the procedure take?**

Depending upon the areas to be treated, the procedure can take from about thirty minutes to an hour.

### **How is it performed?**

Since nerves cannot be seen on x-ray, the needles are positioned using bony landmarks that indicate where the nerves usually are. Fluoroscopy (x-ray) is used to identify those bony landmarks. A local anesthetic (like Novocaine) is injected to numb the superficial tissue. The special RF needle is then inserted under X-ray guidance. Most commonly only a dull pressure, not pain, is experienced. After confirmation of the needle tip position, a special needle tip is inserted. When the needle is in good position, as confirmed by x-ray, electrical stimulation is done before the RF lesioning. This stimulation may produce a buzzing or tingling sensation or may be like hitting your "funny bone". You may also feel your muscles jump. You need to be awake during this part of the procedure so you can report to the doctor what you feel. The tissues surrounding the needle tip are then heated when electronic current is passed using the Radio Frequency machine, for 90-120 seconds. This "numbs" the nerves semi-permanently.

### **Will the procedure hurt?**

Nerves are protected by layers of muscle and soft tissues. The procedure involves inserting a needle through skin and those layers of muscle and soft tissues. A local anesthetic is given via a very thin needle prior to inserting the RF needle.

### **Will I be "put out" for this procedure?**

No. This procedure is done under local anesthesia. Most of the patients also receive intravenous sedation and pain medicine, which makes the procedure easier to tolerate. The amount of sedation given depends upon the patient tolerance. It is necessary for you

to be awake enough to communicate easily during the procedure.

**How is the procedure performed?**

It is done with the patient lying on the stomach. The patient is monitored with EKG, blood pressure cuff, and blood oxygen-monitoring device. The skin on the back is cleaned with antiseptic solution and then the procedure is carried out. X-ray (fluoroscopy) is used to guide the needles.

**What should I expect after the procedure?**

Initially there will be muscle soreness for a few days after the procedure. Ice packs will usually control this discomfort. After that time, your pain may be gone or lessened significantly.

**What should I do after the procedure?**

You should not drive home. We advise patients to take it easy for a day after the procedure. You may want to apply ice to the affected area. You can perform activity as tolerated.

**Can I go to work to work the next day?**

You should be able to return to your work the next day. Your physician may restrict certain activities after the procedure.

**Can the procedure be repeated?**

If the first procedure does not relieve your symptoms completely, your doctor may recommend having a repeat procedure. Because these are not permanent procedures, it may need to be repeated if the pain returns (i.e., 6-12 months).

**Will Radiofrequency Lesioning help me?**

It is very difficult to predict if the procedure will indeed help you or not. Generally speaking, the patients who have responded to local anesthetic blocks or cortisone injections in the facet joints have better outcomes.

**What are the risks?**

Generally speaking, this procedure is safe. With any procedure there are risks, side effects, and the possibility of complications. The risks and complications are dependent upon the site(s) that are lesioned. With any injection through the skin, there is a risk of infection. This is why sterile conditions are used for this procedure. The needles have to go through skin and soft tissues, which will cause soreness. The nerves to be lesioned may be near blood vessels or other nerves which can be potentially damaged. As with other types of injections, you should not have the procedure if you are currently taking blood thinning medicine (Coumadin®). Great care is taken when placing the Radiofrequency needles using X-ray, but rarely do complications occur. You should discuss any specific concerns with your physician.