

Mid-Tennessee Bone and Joint Clinic

Radiofrequency (RF) Lesioning

What is Radiofrequency (RF) Lesioning? RF Lesioning is a safe, proven means of interrupting pain signals. Radiofrequency current is used to heat up a small volume of nerve tissues, thereby interrupting pain signals from that specific area.

Who is a candidate for the procedure? This procedure is meant to give long-lasting pain relief and is indicated when significant but short-lasting pain relief has been obtained from prior diagnostic and therapeutic nerve blocks or joint injections.

Radiofrequency treatment of tissue usually blocks pain signals for a prolonged period of time. However, the body may regenerate pain pathways over time (6-12 months). It is not unusual for the procedure to be repeated.

The Procedure

- You will lie either on your back or stomach, depending on the approach the doctor will take and the location of your problem area.
- You will need to stay awake and alert to aid in properly pinpointing the placement of the lesioning electrode.
- A local anesthetic will be administered and a small needle will be inserted into the general area where you are experiencing pain. Using video X-ray guidance, your doctor will then guide the needle to the targeted area.
- A microelectrode is then inserted through the needle to begin the stimulating process.
- During the procedure, you will be asked if you are able to feel a tingling sensation. The goal of the stimulation process is to help the physician determine if the electrode is in the best area for treatment that will produce the most relief.
- Once the needle and electrode placement are verified, a small radiofrequency current will travel through the electrode into the surrounding tissue to heat and eliminate the pain pathway.
- The procedure will take approximately 20-30 minutes with a recovery period of approximately 15-30 minutes.
- The needle is removed and a small bandage will be placed on the tiny area where the needle was injected.

Instructions (Day of Procedure)

- You may not eat for six hours before the procedure. Continue taking your medications as prescribed with the exception of blood thinners.
- If you are taking blood thinning medication, you will be instructed when to stop taking the medication. Medical clearance may be required prior to stopping some blood thinning medications.
- It is recommended you bathe with anti-bacterial soap before the procedure.
- Your procedure will take place at the Surgery Center of Middle Tennessee. You will be contacted and told when to arrive. Expect to be at the Surgery Center for approximately two hours.
- You will be monitored throughout and after the procedure.
- If you have any known allergic reactions to having medication injected, have an active infection, rash, or are pregnant, inform the doctor and/or nursing staff.
- Please bring your insurance card and driver's license.

NOTE: Patients are NOT permitted to drive themselves home after this procedure. Please make arrangements for someone to drive you home.

After the procedure

- After the procedure is completed you will be monitored in the recovery area. When your blood pressure, pulse, and breathing are stable, you should be discharged and able to leave with a responsible adult.
- You may experience some soft tissue discomfort at the needle placement site(s) following the procedure. Like other soft tissue wounds, this discomfort will subside over several days (and sometimes weeks).
- Your legs may feel slightly heavy and may be numb. You may feel that your pain is gone or quite less. This is due to the local anesthetic injected. This sensation wears off in a few hours.

Risks: Generally speaking, this procedure is safe. However, as with any procedure, there are risks including, but not limited to: spinal puncture with headache, infection, bleeding inside the epidural space with nerve damage, or worsening of present symptoms resulting in numbness and weakness.

Possible Side Effects: The most common side effect is pain which is temporary. Other side effects include bruising, swelling, or soreness at the injection site, or transient weakness and numbness.