

Radiofrequency Lesioning (RF)

Most patients with chronic low back and neck pain can be helped with a combination of medication, physical therapy, and selective spinal injections. Occasionally, patients report ongoing pain in spite of these measures. Radiofrequency lesioning can be helpful in certain patients with neck and back pain who have not responded to any other therapeutic measures.

What happens during the radiofrequency lesioning procedure?

If you have at least temporary improvement from diagnostic spinal injections, radiofrequency lesioning may be an effective way to interrupt the pain signals for an extended period of time. These procedures are done much the same way as other spinal injections. Once positioned appropriately, a fluoroscope (X-ray guidance machine) assists in identifying the specific area to be treated. The area is cleaned and the skin is numbed. The special radiofrequency needle is inserted under X-ray guidance next to the pain fibers in your spine. The microelectrode is then inserted through the needle to begin the stimulation process. During this process you will be asked by your doctor if you are able to feel a tingling sensation. The object of the stimulation process is to help determine if the electrode is in the optimum area for treatment, thus producing the best relief. Once the needle and electrode placement is verified, treatment can begin. The small radiofrequency current will travel through the electrode and into the surrounding tissue, causing the tissue to heat and eliminate the pain pathways. You should alert the doctor if at any time during the procedure you experience any significant discomfort. Depending on the procedure performed, the typical procedure time is 30 to 60 minutes.

What should I expect after radiofrequency lesioning?

You may experience some soft tissue discomfort at the needle placement sites following the procedure. As with any soft tissue wound, this usually subsides over the next several days. Occasionally, you may experience a burning or numb sensation, which usually subsides over several weeks. The procedure is usually done on an outpatient basis.

Radiofrequency treatments to the tissues block pain signals for a prolonged period of time; however, the human body may regenerate the pain pathways over time. It is not unusual that the procedure may need to be repeated, but most patients report longer lasting relief than with other spinal injections, which are commonly done with local steroids.

Radiofrequency treatment will allow improvement in your day-to-day activities. You should be able to resume normal activities, including work, as soon as you feel able. However, any pre-existing physical restrictions you have prior to the procedure may still remain.

What are the risks associated with radiofrequency lesioning?

In general, radiofrequency lesioning is a very safe procedure. As with any procedure, there are certain risks involved. Like with all injections, there is a very small risk of bleeding, infection, or allergic reaction to local anesthetic. In rare cases, nerve damage may occur, which may lead to persistent symptoms of numbness, burning, or weakness. However, these are extremely rare. You may call (404) 778-7000 if you have any questions.