



## **Radiofrequency Nerve Ablation for Chronic Back Pain**

Radiofrequency nerve ablation (RFA) can provide highly effective, long-lasting relief for chronic back pain.

Also known as radiofrequency neurotomy or lesioning, this technique uses heat generated by RF energy to interrupt specific pain impulses in the spine. This minimally invasive technique can provide a safe and effective alternative for patients battling chronic pain in the lumbar or cervical spine.

### **What Is RF Nerve Ablation?**

To disrupt the transmission of pain signals to the brain, RF ablation applies high radiofrequency waves — a type of electromagnetic energy — to a predetermined region along on a sensory nerve. A radiofrequency needle applies heat to the coating of the nerve or myelin, creating a small, circular lesion.

Thanks to this tiny lesion, the nerve is unable to transmit pain signals to the brain.

For chronic conditions of the back, this procedure is used on medial branch or lateral branch nerves, depending on the location of the pain. These nerves don't affect movement; this procedure only interrupts signal transmission.

To identify the location of the nerve, the doctor uses fluoroscopic imagery guidance. This form of guidance is also used for corticosteroid injections and regenerative medicine treatments like platelet-rich plasma (PRP) and bone marrow-derived stem cell injections.

### **When Is RF Nerve Ablation Used?**

Neurotomy can be used for many types of spine pain.

One of the most common uses of RF nerve ablation is for osteoarthritis of the spine (spondylosis), knee osteoarthritis, hip osteoarthritis, and continued post-procedure pain following a joint replacement. . It is also effective for treating back and neck pain from car accidents (whiplash) and work-related injuries.

This procedure may benefit patients who have pain on one or both sides of the spine, or in the hip or knee joints.. If discomfort worsens when extending the back,, twisting, laying on your stomach, or lifting — — this procedure may provide relief.

### **Is Radiofrequency Nerve Ablation Right for You?**

To determine whether you would benefit from spinal or joint RF (Radiofrequency/Thermal) neurotomy, the doctor will perform a preliminary diagnostic test. During the test, the doctor will administer a temporary nerve block to the identified



area. If the procedure relieves your pain (albeit temporarily), you are likely a good candidate for the ablation.

Nerve ablation for back pain is an outpatient procedure that takes less than two hours. The procedure is typically performed in the doctor's office. You can return home once it is complete and return to work the next day.

Although this procedure is not the answer for everyone, most patients report significant relief for as long as two years. Because the nerve will eventually regenerate and the lesion will heal, the doctor can simply repeat the procedure once the pain returns.