

EMORY PAIN CENTER

Intercostal Nerve Radiofrequency Ablation (RFA)

What is intercostal nerve radiofrequency ablation (RFA)? Intercostal nerve radiofrequency ablation (RFA) is a minimally invasive procedure used to manage chronic pain in the chest and rib area. It involves applying controlled heat that is generated by radiofrequency energy to the intercostal nerves, which are the nerves located between the ribs. The goal of this procedure is to disrupt the pain signals transmitted by these nerves, thus providing long-lasting pain relief.

What are the indications for intercostal nerve RFA? Intercostal nerve RFA is typically recommended for individuals with chronic pain conditions affecting the chest and rib area, such as post-herpetic neuralgia, intercostal neuralgia, or chronic pain due to nerve damage or inflammation in the intercostal nerves.

How is intercostal nerve RFA performed? Intercostal nerve RFA is performed as an outpatient procedure. You will be positioned comfortably, and the skin over the treatment area will be cleansed with an antiseptic solution. Using imaging guidance, such as fluoroscopy or ultrasound, a thin needle with a radiofrequency electrode is inserted near the targeted intercostal nerves. Local anesthesia may be used to numb the area. The electrode delivers radiofrequency energy to heat and ablate the nerves, interrupting their ability to transmit pain signals. The procedure typically takes around 30 to 60 minutes.

What are the benefits of intercostal nerve RFA? Intercostal nerve RFA offers several potential benefits for individuals with chronic chest and rib pain. These include:

1. **Long-lasting pain relief:** Intercostal nerve RFA can provide long-lasting pain relief by disrupting the pain signals transmitted by the intercostal nerves. The duration of pain relief can vary among individuals but may last several months to a year or more.
2. **Improved quality of life:** By reducing or eliminating chronic chest and rib pain, intercostal nerve RFA can significantly improve daily functioning, allowing you to engage in activities and enjoy a better quality of life.
3. **Minimally invasive:** Intercostal nerve RFA is a minimally invasive procedure, involving small needle punctures and localized treatment, resulting in less tissue damage, reduced scarring, and a quicker recovery compared to open surgery.

What are the potential risks or side effects of intercostal nerve RFA? Intercostal nerve RFA is considered safe, but like any medical procedure, it carries some risks. Potential risks and side effects may include infection, bleeding, nerve injury, temporary soreness or discomfort at the treatment site, or rare complications related to the radiofrequency energy. These risks will be discussed with you by your healthcare provider before the procedure.

What should I expect after intercostal nerve RFA? After the procedure, you may experience temporary soreness or discomfort at the treatment site, as well as an initial increase in pain before experiencing the full effects of pain relief. Your healthcare provider will provide instructions for post-procedure care, including pain management strategies and activity restrictions. It is important to report any new or worsening symptoms to your healthcare provider and attend scheduled follow-up appointments.