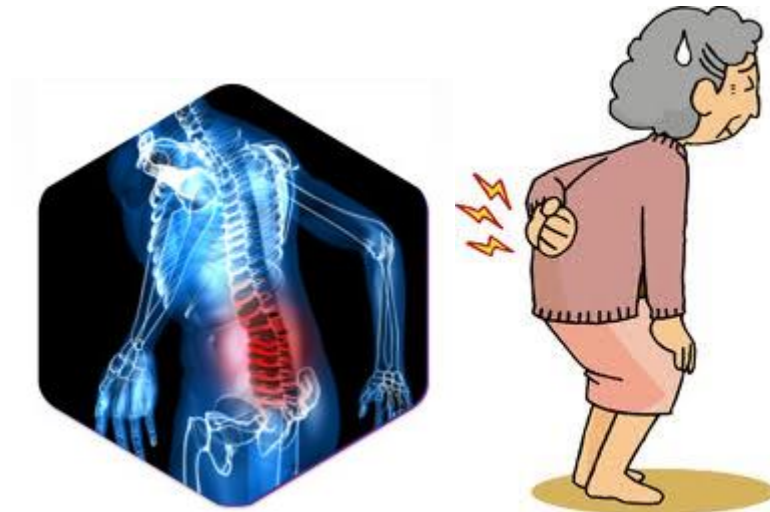


Radiofrequency Ablation

What is radiofrequency ablation?

Radiofrequency ablation refers to a pain management procedure that has been revolutionary in providing long-term relief for chronic neck and back pain. It is called RFA for short and goes by a number of different names such as radiofrequency neurotomy, radiofrequency lesioning or medial branch rhizotomy.

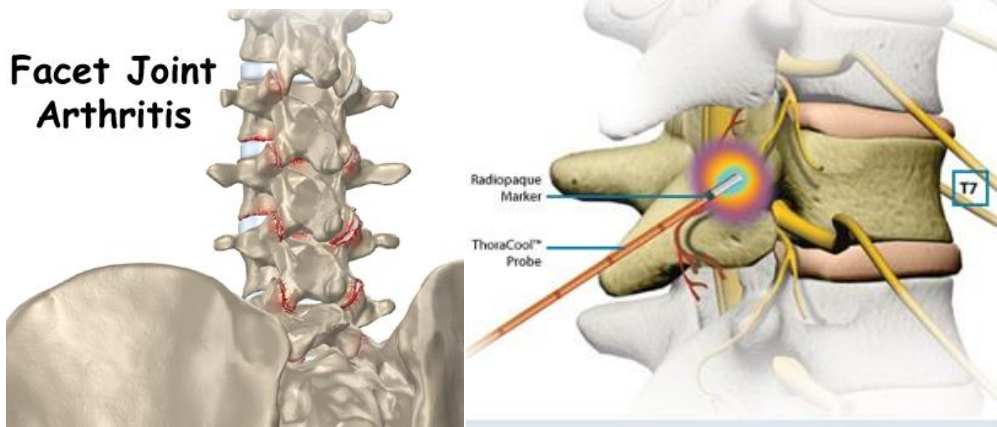
The procedure involves applying thermal heat by radiofrequency to deaden the tiny nerve endings that supplies sensation to the painful joint(s) being treated. Because of its effectiveness and long duration of pain relief, radiofrequency ablation represents one of the top five pain management procedures of all time.



For what conditions does RFA help?

There are multiple applications for radiofrequency procedures. The most common is to help with facet arthritis in the lumbar spine to alleviate chronic low back pain. RF procedures also work well for chronic neck pain due to facet arthritis as well. This is called facet syndrome when arthritis causes damage to those joints leading to neck or back pain.

Facet Joint Arthritis



Recently, studies have shown success with radiofrequency neurotomy of the sacroiliac joint as well. A study presented at the American Academy of Pain Medicine showed over half of patients receive three to six months of pain relief for SI joint radiofrequency. Radiofrequency procedures are also providing benefits for occipital nerves to help with the pain from migraines along with cluster and cervicogenic headaches. The indications for radiofrequency procedures continues to expand, which is just one of the reasons the procedure is so exciting.

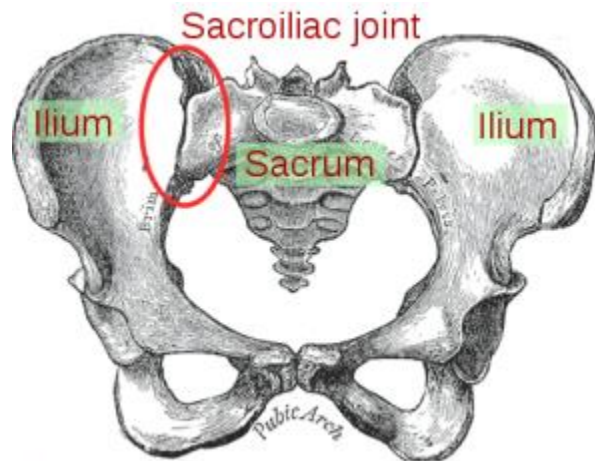
How are radiofrequency procedures performed?

These procedures are performed as an outpatient at a procedure center. Pain management doctors may use IV sedation for the procedure, but it is not absolutely necessary. It may be enough to simply provide numbing medicine under the skin and in the soft tissues down to the area being treated, or the patient could simply take a Valium half an hour prior to the procedure as well. The area being treated is sterilized and the vast majority of pain doctors use fluoroscopy for the procedure. This is a real-time form of x-ray that helps ensure accuracy of needle placement. The doctor places the radiofrequency needles into position, and the latest radiofrequency machines allow up to four joints to be treated simultaneously. Once the needles are in acceptable position, typically pain doctor will inject contrast to ensure satisfactory positioning. At that point the doctor will stimulate the needles to see if they happen to be close to a nerve root as opposed to simply the nerve endings being treated. The goal is to simply heat up the tiny nerve endings and deaden pain. If the patient's leg or arm jumps, the needles are too close to a nerve root and will be repositioned. Once satisfactory, the tips of the needles are then heated up for a period of time. The timeframe and temperature will vary based on the area being treated and the physician's preference. Typically the heat is applied for approximately 90 seconds at 80°C. Once the procedure is complete, the patient will be monitored for a period of time to ensure stable vital signs and no allergic reaction occurs. You will need a ride home and your doctor will provide specific follow up instructions.

How well do these procedures work?

Prior to radiofrequency ablation coming into usage, most pain procedures consisted of a few weeks to a few months of pain relief. Studies of radiofrequency ablation, however, have shown between six and 18 months of pain relief which is truly remarkable.

One study in the lumbar spine showed an average pain relief of 470 days, which is approximately 15 months. Studies have also shown that if pain relief wears off and a repeat procedure is necessary, virtually identical results can be expected on the second procedure. The tiny nerve endings have a tendency to grow back.



New studies are showing RFA works well for an SI Joint problem.

The newest studies on the sacroiliac joint have shown that over half of patients can expect approximately 6 months of pain relief. This has been exciting to see as well. One thing to note is that pain relief may not be seen right away. For a few weeks, some individuals experience an increase in pain due to muscle spasms sparked up by the procedure. These will typically settle down and pain relief will commence after approximately 2 weeks.

What are the risks of these procedures?

There are some small but real risks associated with radiofrequency procedures. There is a small risk of infection and bleeding. If the patient is on blood thinners, they should be stopped a week or so prior to the procedure. The pain doctor will specify when to cease those medications. There is a small risk that an actual nerve root can be injured during the procedure. That is why the test is performed prior to the heat being generated, but it can still occur. There's also a risk that the procedure may simply not work. Prior to undergoing a radiofrequency procedure, patients typically receive what is known as a medial branch block with numbing medicine being injected into the area. If this provides over 50 to 80% pain relief, insurance companies will approve the radiofrequency procedure. So this should give an indication that the procedure will work, but there's always a chance that it may not. If you are experiencing chronic neck or back pain, or headaches, a radiofrequency procedure may provide lengthy pain relief.