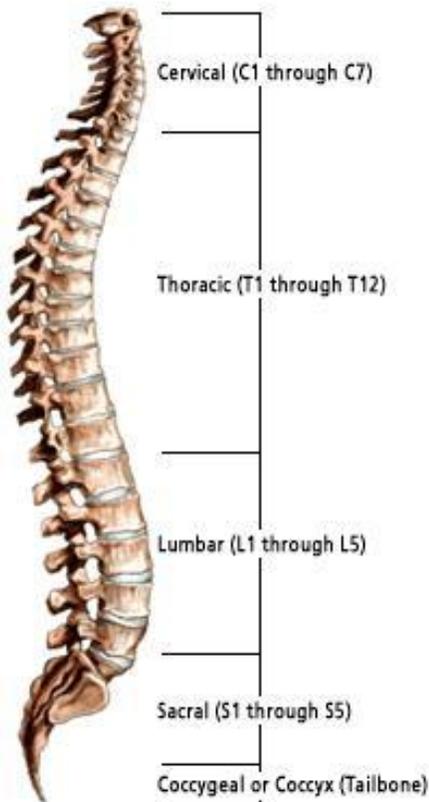




Radiofrequency Thermocoagulation (Neurotomy)



What is radiofrequency thermocoagulation (or radiofrequency neurotomy)?

Radiofrequency (RF) thermocoagulation is a safe, proven means of interrupting pain signals. Radiofrequency current is used to heat up a small volume of nerve tissue, thereby interrupting pain signals from that particular area. Radiofrequency techniques have been available for treating various pain disorders since the early 1970s. Since the 1980s physicians specializing in chronic pain diagnosis and treatment have found an increasing number of applications for this established technology. Some more common medical conditions which respond to radiofrequency techniques include chronic low back pain, thoracic spine pain, and sacroiliac joint dysfunction.

Traditional techniques to destroy painful nerves have used chemicals such as phenol or alcohol. Unfortunately, these techniques have significant side effects due to limited ability to control the spread of these liquids. Radiofrequency needles, accurately placed with the aid of fluoroscopic X-ray machines, generate local heat at the tip when electrical current is applied, which can be precisely controlled to thermocoagulate painful nerves with minimal tissue damage. The procedures can be

performed with little trauma using local anesthesia and intravenous sedation.

What is the typical procedure?

You will be asked to lie flat on your stomach. After the local anesthetic and IV medication for sedation are administered, the doctor will insert a small needle into the area where you experience pain.

Under the guidance of X-ray, the doctor will guide the needle to the exact target area. A microelectrode then will be inserted through the needle to begin the stimulation process. During this process, the doctor will ask you if you feel a tingling sensation. The object of the stimulation process is to help the doctor determine if the electrode is in the optimal area for treatment to produce the most relief.

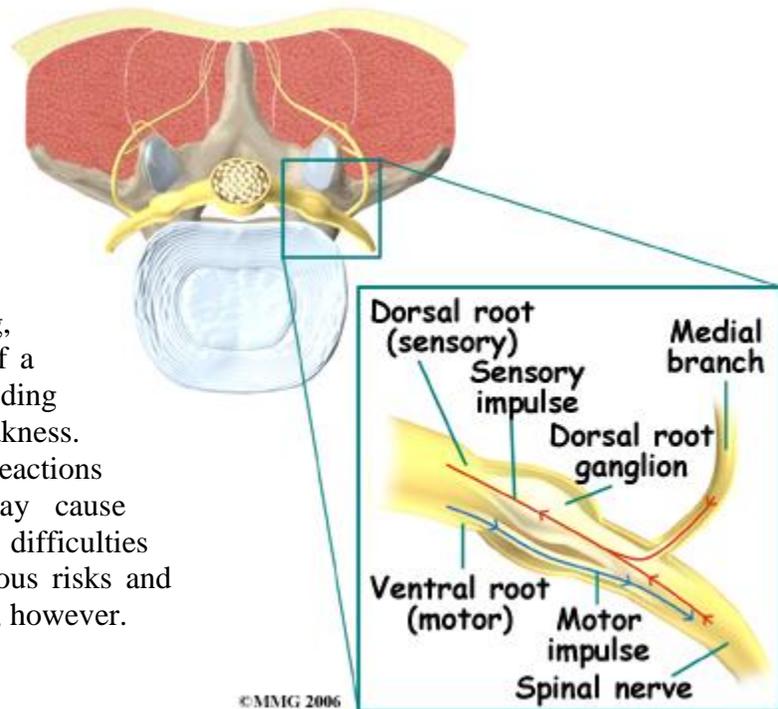
Once the needle electrode placement is verified, treatment can begin. A small radiofrequency (RF) current will travel through the electrode into the surrounding tissue, causing the tissue to heat and eliminate pain pathways. You should alert the doctor if at any time during the procedure you experience discomfort, especially in the extremities. Otherwise, you may experience a slight burning or pressure sensation at the site of the injection.

What if the pain relief doesn't last?

Radiofrequency treatment of tissue usually blocks pain signals for a prolonged period of time. However, the human body may regenerate pain pathways over time. It is not unusual that the procedure may need to be repeated at some point in the future.

What are the risks of radiofrequency thermocoagulation?

As with any procedure, there are some inherent risks, although most of these are minimal. Common risks include but are not limited to bruising, bleeding, headaches, irritation of a nerve or nerve injury, including paralysis, numbness and weakness. Risks also include infection or reactions to the medications which may cause breathing difficulties and cardiac difficulties which may lead to death. Serious risks and complications are extremely rare, however.



Pre-Procedure Instructions for Radiofrequency Thermocoagulation

- Please stop all aspirin, aspirin products, and all nonsteroidals – except Celebrex– 5 days before the procedure. Examples of nonsteroidals that need to be stopped are: **Motrin, Advil, Naprosyn, Naproxen, Aleve, Indocin, Lodine, Orudis, Relafen, Daypro, Tolectin, Mobic, Torodol, Voltaren, Trilisate, Dolobid, Arthrotec, Ibuprofen, Diclofenac and Clinoril.**
- If you have questions regarding these types of products or their discontinuation, you should discuss this with one of our staff.
- If you take fish oil or Vitamin E supplementation, please stop these 5 days prior to the injection.
- If you take **Coumadin, Heparin, Lovenox, Warfarin, Pradaxa, Debigatran, Orgaran, Innohep, Fragmin, Argatroban, Plavix, Effient, Prasugrel, ReoPro, Ticlid, Trental, Persantine,** or any other **blood thinner**, notify your doctor. This medication must be discontinued prior to an injection and requires permission from the provider prescribing it.
- Do not eat 6 hours or drink 2 hours prior to the procedure. You may take routine a.m. medications with a small amount of water.
- Please wear comfortable, loose fitting clothing with an elastic waist band such as gym shorts, sweats, or pajama bottoms. Please do not wear jeans. Due to the use of betadine, please if possible wear dark colors.
- You may be requested to obtain laboratory work and an EKG prior to your procedure. This will be discussed and ordered, if necessary, at the pre-procedure appointment with your provider.
- For your safety, you must have a responsible adult to drive you home. Failure to have a driver may result in the cancellation of your procedure. Taxis are not permitted.
- If you have any problems, please contact our office directly to speak with a medical assistant.
- You will need to schedule a follow-up appointment for approximately 10 days to 2 weeks after your procedure. If this is not already scheduled please contact our office to schedule immediately.

Date of procedure: _____ Arrive at: _____ a.m./p.m.

Gateway Surgical Center 690 N. Cofco Center Court Suite 150 Phoenix, AZ 85008 (602) 288-4441	NSASC 9439 E Ironwood Square Dr. Suite 100 Scottsdale, AZ 85258 (480) 355-3750	Tempe Surgical Suite 4765 S Lakeshore Dr. Tempe, AZ 85282 (480) 860-8998
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Post Radiofrequency Thermocoagulation Instructions and Follow-up Orders

- **Activity:** Rest and limit your activity the remainder of the day of the procedure. You may resume normal activities, including work, as soon as you feel able, unless your provider has instructed you otherwise. Any physical restrictions given prior to the procedure may still remain.

If you begin to feel much better several days after your procedure, slowly increase your activity, allowing your muscles to rehabilitate. Rest, medications, and physical therapy, as your provider has advised, are very important for your overall treatment.

- **Diet:** Return to your normal diet as tolerated.
- **Medications:** ■ Resume aspirin and other anticoagulants the first day after the injection.
■ Resume your other medications as per your physician's previous directions.
- Should you have fever, chills, drainage, excessive swelling or redness from the injection site, bladder or bowel dysfunction, or change in sensation or muscle strength, please contact our office immediately. If you cannot reach your physician, please present to the nearest emergency room.
- The dressing may be removed after 24 hours.
- You may shower immediately, but please avoid swimming or baths/Jacuzzis/hot tubs for the first 2 days after the procedure due to increased risk of infection.
- You may use ice compresses over the injection site – 20 minutes on, then 20 minutes off. Repeat this cycle as required. If using a gel pack, make sure a towel or piece of cloth is placed between the cold pack and the skin. Do not apply the cold packs to the numb areas following injection.
- Common side effects following the procedure include:
 - Decreased pain and possibly some numbness for 4 to 8 hours due to the local anesthetic.
 - Possible increased overall pain for 2-4 weeks.
 - Discomfort at the injection site.
 - A small amount of bleeding at the injection site.
 - Back stiffness.
 - If a steroid medication was used during the procedure, possible side effects include facial flushing, insomnia, and occasionally a low-grade fever.

All of the side effects listed should disappear within 1 to 3 days after the procedure unless otherwise noted.

- If you experience a post-procedure headache, please contact our office. For the first 24 hours, lie down as much as possible. You can take Tylenol up to 3 grams per day in doses of 1 gram every 8 hours. Drink plenty of fluids in the form of caffeinated beverages. The caffeine will often minimize the headache substantially. If you continue with headaches after 24 hours following the procedure, please contact our office.