

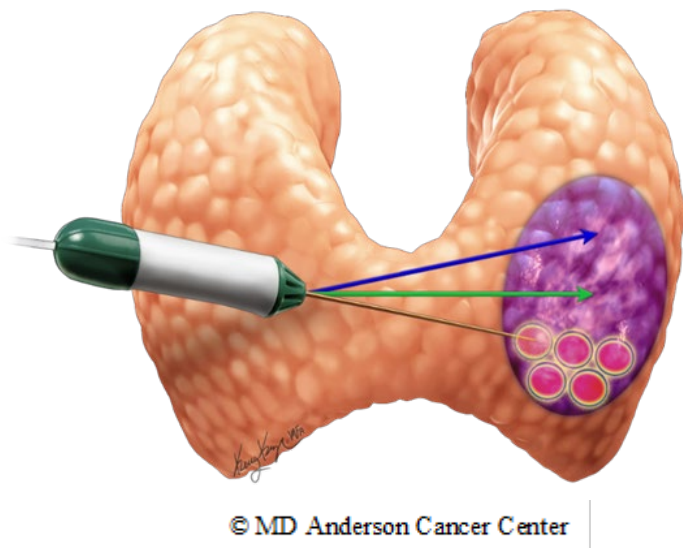
Radiofrequency Ablation

Thyroid Nodule and Soft Tissues in the Neck

Radiofrequency Ablation (RFA) is a way of killing tumor cells without surgery or radiation therapy. The recovery from ablation is faster when compared to surgery and treatment is much shorter than radiation therapy.

This technique is specific to the thyroid or soft tissues in the neck. RFA is a technique that uses an electrode, or small needle, with high frequency alternating current to damage the tissue in a small area by heating it up. Although heat creates damage to the tissue, it only occurs in a region within a few millimeters of the electrode.

RFA technology is safe and FDA approved. It has been widely used for a range of conditions, including nerve pain, certain types of cancer, uterine fibroids and some vascular conditions.



Ultrasound imaging is performed to confirm the target nodule and identify surrounding tissues before the procedure. Using ultrasound guidance, a small RFA probe is placed into the targeted nodule and heat is turned on to destroy the nodule.

Risks

RFA procedures are considered minimally invasive procedures. However, there are risks associated. Complications are like surgery, but at a lower risk. These may include:

- Pain, which may require pain medicines
- Bleeding, which may require a blood transfusion
- Infection, which may require antibiotic medicines
- Injury to healthy tissue around the treatment area
 - If an injury occurs, you may need to stay longer in the hospital or have another procedure. This is rare.
 - Risks include vocal cord paralysis, damage to structures around the thyroid gland (skin, nerves, airway, esophagus), or changes in thyroid function.

All these risks are carefully considered before you are offered this procedure. Your doctor will discuss your risk with you in detail before you have the procedure.

Preparing for the Procedure

- The procedure will be performed in Diagnostic Imaging. Check your MyChart account for the exact time and location.
- You will be scheduled for lab tests to check your blood. Tests must be done within 7 days before the ablation procedure.
- **Do not** eat or drink anything after midnight before your procedure.
- You may take prescription medicines as directed by your doctor with sips of water.
- **Do not** bring valuables with you to the appointment. The hospital is not responsible for any lost valuables.
- Click on the link below for the latest information on MD Anderson's COVID precautions and patient visitation policy.

<https://www.mdanderson.org/patients-family/becoming-our-patient/planning-for-care/coronavirus-protections.html>

- If your procedure requires sedation or anesthesia, you must have a responsible adult present at discharge. This person will receive discharge instructions and will need to sign you out before you can go home. A taxi/ride share driver **does not** meet these criteria.

Precautions

Tell the radiologist if you:

- Have any metal implants or pumps
- Have a pacemaker or defibrillator in your heart
- Have any allergies
- Weigh over 400 lbs.
- Are taking any blood thinning medicines such as Coumadin®, Plavix®, Heparin, Lovenox® or aspirin

External Medical Devices

If you have an external medical device, you may be asked to remove the device at your procedure visit. Bring additional supplies and necessary medicines as needed to your appointment.

Procedure

- Arrive at your scheduled check-in time.
- An IV will be placed in a vein in your hand or arm. An IV is a small tube through which you receive medicine and fluids.
- You may be given sedation and anesthesia medicine for this procedure.
- Most patients receive deep conscious sedation during the treatment. This type of sedation makes you very relaxed, but you may respond to some pain felt. Some patients may need general anesthesia during the ablation procedure. This type of anesthesia affects your entire body and will put you to sleep.
- Your heart rate, breathing and other vital signs are monitored while you are under anesthesia.

- During the procedure, you will have an ultrasound.
- Using the images from the scans, the doctor will place a needle with the electrode into the tumor area and perform the ablation.
- The procedure takes less than 60 minutes. Time varies depending on the number or size of nodules. Monitoring before and after can add another 60 to 120 minutes. You may go home the same day if there are no complications.
- After the ablation, a small bandage will be placed over the surgical area.
- You will slowly wake up as the sedation or anesthesia wears off after surgery.
- After the treatment, you are taken to the recovery area for monitoring.
- The ablation procedure is done as an outpatient treatment. Your doctor will decide if you will need to stay in the hospital after the procedure.
- Travel recommendations for patients after an ablation procedure is to remain in the Houston area for at least 24 hours after being discharged from the hospital. If you are flying, we recommend purchasing a flight that can be easily changed if there is a need to stay for an extended period. The safest option would be to consider planning to drive home, if feasible.
- Talk with your doctor for more information about what to expect.

Discharge Instructions

- You should be able to do all your normal activities by the next day. Most patients can return to eating normally by that same evening. You may experience bruising at the neck site, which normally resolves in 1 to 2 weeks.
- Many patients feel mild to no pain after the procedure. Others have moderate pain requiring medicine.
- You may have soreness and tenderness at the puncture site. Some patients also have numbness or tingling.
- You may also feel fatigued for several weeks after the procedure.
- Most patients recover within 2 weeks after the procedure.
- The puncture site does not require any sutures or staples. You may remove the bandage the next day.
- You will receive an electronic questionnaire sent through MyChart or a phone call about 1 to 2 weeks after the procedure to see how you are feeling.
- About 4 to 6 weeks after the procedure, you may have an ultrasound, CT scan and clinic visit so that your doctor can evaluate the treated tumor.
- Scans may be repeated in 3 and 6 months after the procedure.
- If needed, the area may be treated again.

When to Call the Doctor



Contact your doctor right away if you notice any of the following:

- Difficulty swallowing or speaking
- A fever of 100.4°F (38°C) or higher
- Redness, swelling, bleeding or drainage from the site where the needle was inserted

If you have questions or need more information, call:

Neuro Interventional Radiology - Ultrasound

Monday through Friday, 8 a.m. to 4:30 p.m.

713-792-9199

After regular business hours or on the weekends, call the page operator at 713-792-2121 and ask for the neuro radiologist on call.