

Diabetes & Endocrine Specialists

Radio Frequency Ablation for Thyroid Nodules

Radiofrequency Ablation, also known as RFA, is a minimally invasive option to treat thyroid nodules. Guided by ultrasound imaging, we can precisely deliver radiofrequency waves to heat up thyroid nodules and shrink them.

Thank you for choosing “Diabetes and Endocrine Specialists” for your RFA procedure. Please read this information carefully, this will make sure that your experience with us is safe and pleasant.

What to expect, Step by Step

Pre-Procedure

Radiofrequency ablation takes place in our office in La Jolla. Although you will not be under general anesthesia, you will need to follow some pre-procedural instructions from us.

Dr. Schneider will review the list of your current medications and provide instructions. In most cases, your medications will not affect the procedure. If you take medications for diabetes or high blood pressure, please keep taking them.

If you're on blood thinning medications (Aspirin, Warfarin, Coumadin, Eliquis, etc), you will need to stop taking them 2-3 days prior to the procedure.

Be sure to let us know if you have a pacemaker, implants, are pregnant, or are on any medication (especially for blood thinning). Please let us know if you have any allergies, especially to numbing agents (like Lidocaine or Xylocaine) or latex.

On the Day of your Procedure

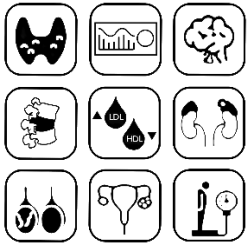
Please arrive to our office on time, ideally 30 minutes prior to your appointment.

We strongly suggest that you bring someone to drive you to and from the procedure.

Please don't wear makeup, lipstick, or any metal jewelry on the day of the procedure.

Please don't eat for at least 2h prior to the procedure.

You will receive a comfortable gown from us, for the entire time of the procedure.



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The RFA Procedure

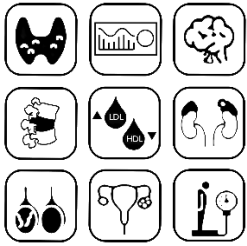
About an hour prior to the procedure or upon check-in, we can optionally offer you a small dose of medicine to help you relax. You will be able to breathe, swallow and talk normally during the entire time.

1. You will receive a comfortable gown and we will ask you to change clothes prior to the procedure.
2. A needle for IV access will be inserted in one of your arms as a cautionary step – for the rare occasion when we may need to administer medication during the procedure.
3. You will lay down on the procedure table and a blood pressure cuff as well as a heart rate monitor will be attached to you, for continuous monitoring of your vitals.
4. Two adhesive grounding pads will be attached to the skin of your thighs.
5. Your neck will be cleaned and your head will be placed on a small cushion with your neck extended.
6. Under continuous ultrasound guidance, Dr. Schneider will administer a local numbing agent to the area surrounding the thyroid.
 - You may feel a slight burning during the injection.
 - You may feel the need to cough or to clear your throat more often, depending on the location of the local anesthesia.
7. Once you're relaxed and your neck area feels numb, Dr. Schneider will make a small (<1mm) incision to your neck and insert a thin radiofrequency needle into the nodule under continuous ultrasound guidance.
8. Radiofrequency energy emitted from the tiny active tip at the end of the needle will cause very precise destruction of the targeted tissue.
9. The needle is systematically guided through the entire nodule and the process is repeated until the nodule is completely treated.
 - You will hear the humming sound of the cooling pump
 - You may hear mild "popping" sounds throughout the procedure. These sounds are normal.

Dr. Schneider and his staff will ask you several times during the treatment how you are doing. Please inform us at any time if you feel uncomfortable during the procedure:

- if you feel pain, Dr. Schneider can intensify the local anesthesia
- if you feel nauseous, we can administer a potent nausea medication

The entire procedure takes between 15-45 minutes, depending on the size of the treated nodule(s).



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After the Procedure

Following your treatment, you will be given an ice pack and pain medication, if needed. You can now relax.

After monitoring for a short period of time, you will be discharged.

We strongly suggest that you bring someone to drive you to and from the procedure.

You should be able to return to most of your regular daily activities almost immediately.

For the 2-3 days following the procedure, we recommend that you abstain from:

- Lifting heavy objects (over 10 pounds)
- Strenuous physical activities
- Hot and humid environments (sauna, hot tub)
- Massages to the neck area

Frequently Asked Questions

Is radiofrequency ablation painful?

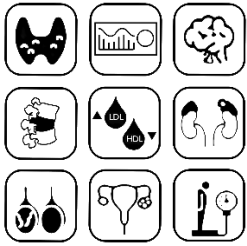
The procedure is so gentle that most people have little to no discomfort. This is because the thyroid nodule itself is not sensitive to pain. Other than the initial injection of numbing medication, the only remaining sensation is mild pressure. Intermittent sensations of discomfort thereafter can be treated with additional doses of pain medication or adjustment of the probe tip.

Radiofrequency ablation does not cause any scarring to the external neck. In many cases, one puncture of the skin is sufficient to treat the entire thyroid gland.

What happens to the nodules after treatment?

In the weeks following the procedure, the cells of the treated thyroid nodule are removed by the body's immune system. Most patients notice the nodule has become smaller in just two to three weeks, with solid nodules taking longer than cystic nodules. The percent reduction depends on the original size and nature of the nodules, with around 40-60 percent after three months and about 60-90 percent size reduction after one year.

The surrounding healthy thyroid gland remains unharmed and can continue to produce thyroid hormone.



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Are there any side effects or complications?

All treatments and procedures have risks and potential side effects - these will be discussed in detail with you by Dr. Schneider. Overall, the RFA is considered to be a “low risk” procedure.

Serious complications are very rare, with damage to the “voicebox” (laryngeal) nerve being one of the more feared complications – however, the risk for laryngeal nerve damage is less than 1%.

Other risks are bleeding, hoarse voice due to nerve bruising, skin burns and infections.

Larger nodules may require more than one treatment for effective nodule shrinkage.