



Dr. *Francis* T. Hall

EAR, NOSE, THROAT, HEAD & NECK

Radiofrequency ablation of thyroid nodule care

A thyroid nodule is a lump in the thyroid. A thyroid nodule may cause a pressure feeling or discomfort in the lower neck. It may also be unsightly. A thyroid nodule may be in either the left or right half of the thyroid gland. Some thyroid nodules are in the isthmus. The isthmus is that part of the thyroid that joins the left and right half. Traditionally symptomatic thyroid nodules were treated with removing half of the thyroid gland through an incision in the neck. Nowadays some thyroid nodules can be treated with radiofrequency ablation.

What is radiofrequency ablation?

Radiofrequency ablation (RFA) is a scarless technique where the thyroid nodule and only the thyroid nodule is treated with radiofrequency. Because only the thyroid nodule is treated you do not need to take thyroid hormone afterwards. It is done under local anaesthetic and ultrasound guidance in the clinic.

How does RFA work?

RFA works by transferring the energy of radiofrequency to the fluid around the cells within the nodules. This causes the ions in the fluid to vibrate which in turn generates some heat (about 60 degrees Celsius). This heat causes cell death. Simply put, RFA causes the cells inside the nodule to die.

What to expect?

Radiofrequency ablation (RFA) is done under local anaesthetic in the clinic. You are awake but the skin near the thyroid nodule and part of your thyroid are numb. You will be able to feel touching and some pressure but not pain. Using ultrasound a probe connected to a radiofrequency generator is inserted through the skin into the nodule. Each part of the nodule is ablated with radiofrequency until the whole nodule has been treated. Only the thyroid nodule is treated with radiofrequency. The rest of the thyroid is left untreated.

What thyroid nodules are suitable for RFA?

The ideal thyroid nodule for RFA is a 2-4cm benign (non cancerous) symptomatic thyroid nodule. An ultrasound scan of the thyroid and a FNA (fine needle aspiration biopsy) will determine if your thyroid nodule is suitable. The procedure is easier to perform in someone with a slim neck. Microcarcinomas (cancers smaller than 1 cm) are also suitable for RFA. Many autonomous hot thyroid nodules (thyroid nodules that make too much thyroid hormone) are also suitable for RFA.

Does RFA work?

There are many published papers showing that RFA works. Over the next 12 months the nodule will shrink in size. You can expect a 90% decrease in the volume of the nodule.

What to expect after RFA?

Afterward RFA the lower part of your neck will be sore and a little swollen for a few days. It is recommended you place an ice pack or a bag of frozen peas on a tea towel over the sore swollen area. Keep the ice pack on the area for about 15-20 minutes and repeat this every 2 hours. You don't need to do this during your usual sleeping time.

Take paracetamol and an anti inflammatory medication (ibuprofen, voltaren) for a few days. Dr Hall will write you a prescription.

You can return to work in two days' time.

Pain medicines:

- Dr Hall recommends simple pain medication such as paracetamol (Panadol) or anti inflammatories (Brufen, Voltaren)

Activity:

- Dr Hall recommends no vigorous exercise for two days after the procedure as this may induce bleeding.

Problems:

- Just like a blood test, it is possible to get a bruise after RFA. Sometimes bleeding can occur. Damage to the skin itself is very uncommon.
- A hoarse voice from injury to the recurrent laryngeal nerve to the vocal cords can occur and if it does occur it is usually temporary but may be permanent.
- An infection may occur at site of the FNA, this is very rare. If you feel increasing unwell, please call Dr Hall urgently.
- A few patients may need a second RFA procedure.

Follow up appointment:

- Dr Hall usually sees his RFA patients six weeks after the procedure. He recommends repeating the ultrasound scan 6 and 12 months after the procedure. His nurse will contact you with the results of these scans.

Any problems call or text Dr Francis Hall on 021 733 677

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