



**Subject:** Radiofrequency Tumor Ablation

**Effective Date:** 12/22

## DESCRIPTION

Radiofrequency ablation (RFA) of a tumor involves the delivery of high-frequency alternating current to induce thermal injury of target tissue. Electrodes are inserted directly into the affected area where alternating high frequency current is then emitted. As the current moves into the surrounding tissue, it results in frictional heating of the tissue. As the temperature becomes elevated beyond 60 degrees Celsius, cells around the electrode begin to die (coagulative necrosis). This procedure can be performed percutaneously or through an intraoperative approach with CT, MRI, or ultrasound guidance.

Thyroid nodules are present in up to 60% of patients. Most of these nodules are benign. Benign nodules can lead to hyperthyroidism and compressive symptoms, such as airway compression, difficulty swallowing, or discomfort with clothing. Observation of these nodules may include medications for hyperthyroidism, follow-up visits, and multiple ultrasounds. Patients may experience long-term effects from hyperthyroidism or medication side effects. Surgical intervention involves anesthesia risks, need for thyroid replacement, surgical complications, and cosmetic concerns (scarring).

Thyroid RFA is similar to RFA of other organs but utilizes a lower wattage and finer needles. The procedure is performed in the office setting. A local anesthetic is injected into the region surrounding the thyroid gland then the radiofrequency catheter is guided into the nodule and the nodule is ablated. The advantages of thyroid RFA include:

- Office-based setting
- No incision
- Less need for thyroid supplementation
- No general anesthesia
- Cost-effective

## POLICY

Refer to *MCG ACG: A-0718 Radiofrequency Tumor Ablation* for non-thyroid indications and metastatic or recurrent thyroid cancer.

OSU Health Plan considers radiofrequency tumor ablation medically necessary for the following indications:

- Cytologically benign thyroid nodules when one or more of the following criteria are met:
  - Thyroid nodule is causing hyperthyroidism; or
  - Thyroid nodule is increasing in size and is at least 2 cm in diameter
- Malignant thyroid tumor when the following are met:
  - T1 or T2
  - No lymph node metastasis
  - Patient is not a surgical candidate due to medical comorbidities
- Thyroid tumors when the criteria in *MCG A-0718 Radiofrequency Tumor Ablation* are met

## EXCLUSIONS

OSU Health Plan considers thyroid RFA experimental and investigational for the following indications:

- Cytologically benign thyroid nodules that are asymptomatic and stable in size
- Cytologically benign thyroid nodules that are less than 2 cm in diameter

## RELATED CPT CODES

Code	Description
0673T	Ablation, benign thyroid nodule(s), percutaneous, laser, including imaging guidance

## REFERENCES

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