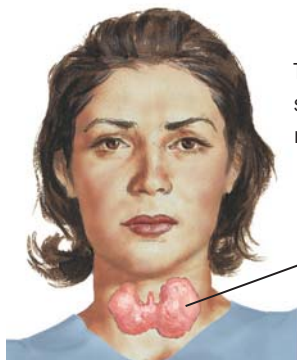


MANAGING YOUR THYROID NODULE



The butterfly-shaped thyroid sometimes develops a lump, or nodule.

Thyroid gland with nodule

Most nodules are benign with no noticeable symptoms, but because some can be very large or cancerous, it is important to investigate the nature of the nodule(s).

Some nodules lead to an overactive thyroid and cause tremor, anxiety, and hunger.



Large thyroid nodule

Other nodules might be visible as a swollen thyroid.



Thyroid scan showing overactive nodule



Blood tests and imaging (x-ray, sonogram, radioactive iodine scan) can show the thyroid nodule.

What Is a Thyroid Nodule?

The thyroid gland lies in the neck. It is part of the endocrine system and produces a substance (thyroid hormone) that helps control metabolism. A thyroid nodule is a lump of tissue on this gland. Nodules may be caused by an infection, cyst, benign tumor, or malignant tumor of the thyroid. Most nodules are benign tumors or cysts filled with fluid. Because some thyroid nodules are cancerous, all nodules should be examined.

What Are the Symptoms of a Thyroid Nodule?

Most people don't know that they have a nodule. Some people may have no symptoms. Others may feel or see a soft, painless swelling near the thyroid in the neck. Most nodules are benign, cold (inactive) nodules, with no effect on health. Hot (overactive) nodules cause anxiety, sweating, weight loss, hunger, and tremor by producing excess thyroid hormone (hyperthyroidism).

A rock-hard nodule that grows rapidly and causes a voice change (hoarseness) or swallowing difficulty suggests cancer and should be removed quickly.

How Is a Thyroid Nodule Diagnosed?

A sonogram (which uses sound waves to make pictures of body parts) can tell whether nodules are present and whether a nodule is solid. Solid nodules may be cancerous.

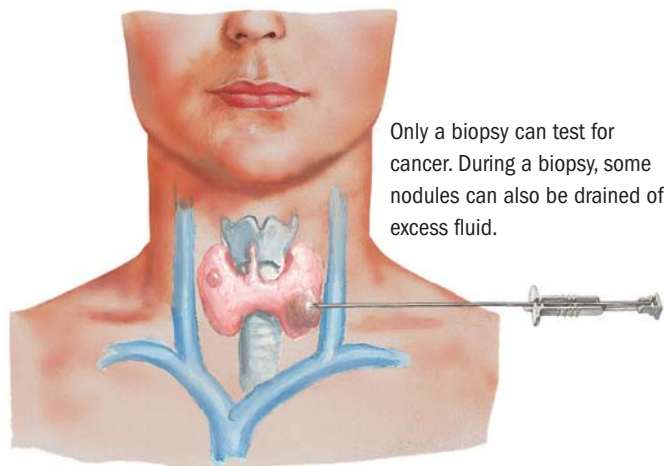
Specialists may also discover nodules on x-ray films of the chest or neck done for other reasons. After nodules are found, two important questions need answers:

- Is the thyroid working normally?
- Is the nodule benign or malignant?

Thyroid function blood tests answer the first question. Most people have normal thyroid function.

A special test (radioactive iodine scan) can tell whether an overactive nodule is producing too much hormone and must be treated.

A doctor will check a tissue sample (biopsy) of the nodule to see whether the nodule is benign. A fine-needle aspiration biopsy (FNAB) is used to get this sample. Using a needle passed into the nodule, the doctor will collect cells from the thyroid gland and examine them under a microscope.



Only a biopsy can test for cancer. During a biopsy, some nodules can also be drained of excess fluid.



Treatments may include using thyroid supplements (levothyroxine). Take medication as instructed by your doctor.



Talk to your doctor about whether surgery or radioactive iodine treatments might be a better option for you.

How Is a Thyroid Nodule Treated?

Most nodules are benign. Benign solid nodules are easily treated with thyroid supplements (levothyroxine) that help prevent nodule growth. Nodules that contain only fluid are drained during the FNAB.

Surgery may be needed to remove large nodules if they could be cancerous or if they crush blood vessels or other tissues in the neck. If the whole tumor cannot be removed, radioactive iodine can destroy remaining cancer cells. This treatment also destroys normal thyroid cells, so after treatment most people develop an underactive thyroid (hypothyroidism) and need medicine to replace thyroid hormone.

Complications after surgery include bleeding, infection, low calcium levels from damage to the parathyroid glands near the thyroid during surgery, or damage to vocal cords. An experienced surgeon usually causes few complications, however. Hormone therapy for benign nodules can lead to an overactive thyroid (hyperthyroidism). Radioactive iodine therapy may cause other glands to swell and dry out.

DOs and DON'Ts in Managing a Thyroid Nodule:

- ✓ **DO** have an FNAB of any suspicious nodule.
- ✓ **DO** find an experienced thyroid specialist.
- ✓ **DO** examine your neck to find new nodules.
- ✓ **DO** tell your doctor if you had radiation therapy to the neck or a family history of thyroid cancer.
- ✓ **DO** call your doctor if you develop symptoms after treatment or surgery.
- ⊘ **DON'T** stop taking or change your medicine because you feel better unless your doctor tells you to.

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NOTES

FOR MORE INFORMATION

Contact the following source:

- American Thyroid Association
Tel: (703) 998-8890
Website: <http://www.thyroid.org>