



Patient education: Thyroid cancer (The Basics)

[Written by the doctors and editors at UpToDate](#)

What is thyroid cancer?

Thyroid cancer happens when normal cells in the thyroid change into abnormal cells and grow out of control. The thyroid is a gland in the middle of the neck ([figure 1](#)). The thyroid gland makes thyroid hormone.

There are different types of thyroid cancer. Some types are more serious than others.

What are the symptoms of thyroid cancer?

Early on, people might not notice any symptoms. They might find out they have thyroid cancer after their doctor does an imaging test of their neck for another reason. Imaging tests create pictures of the inside of the body.

When thyroid cancer causes symptoms, the most common symptom is a growth (called a "nodule") on the thyroid gland. This growth might get bigger in a short amount of time, or it might grow more slowly. In some cases, people see or feel the growth themselves. In other cases, their doctor or nurse feels the growth during a routine exam.

Other symptoms of thyroid cancer can include:

- Hoarseness or being unable to talk
- Trouble breathing
- Trouble swallowing
- A cough or coughing up blood

All of these symptoms can also be caused by conditions that are not thyroid cancer. But if you have these symptoms, tell your doctor or nurse.

Is there a test for thyroid cancer?

Yes. If you have a growth on your thyroid gland, your doctor will do tests to see whether the growth is cancer or not. (Many growths on the thyroid gland are not cancer.) These tests can include:

- Imaging tests – The imaging test most often done is an ultrasound, which uses sound waves to create pictures of the thyroid. Some people also have a thyroid scan. For a thyroid scan, a person gets a pill or a shot with a small amount of a radioactive substance. Then a special camera takes a picture of the thyroid.
- Blood tests
- Fine needle aspiration – For this test, the doctor uses a thin needle to remove a small sample of cells from the growth. Then another doctor looks at the cells under a microscope.

What is cancer staging?

Cancer staging is a way in which doctors find out if a cancer has spread past the layer of tissue where it began, and, if so, how far.

The right treatment for you will depend a lot on the type of thyroid cancer you have, its stage, and your other medical problems.

How is thyroid cancer treated?

Thyroid cancer is usually treated with the following:

- Surgery – In most cases, thyroid cancer is treated with surgery to remove the cancer. Your doctor will remove part or all of your thyroid gland. He or she might also remove nearby lymph nodes, which are bean-shaped organs that are part of the body's infection-fighting system.
- Radioactive iodine – Radioactive iodine (also called "radioiodine therapy") comes in a pill or liquid that you swallow. It has a small amount of radiation and can destroy much of the thyroid gland. Your doctor will decide if you should get radioactive iodine after seeing the results of your surgery.
- Thyroid hormone – Your doctor will prescribe thyroid hormone medicines after surgery or radioactive iodine treatment. That way, your body will have the correct amount of thyroid hormone.

Other treatments that are sometimes used include:

- External-beam radiation therapy – This treatment uses high doses of X-rays, called radiation, to kill cancer cells. The radiation comes from a machine that is outside the body.

- Chemotherapy – Chemotherapy is the medical term for medicines that kill cancer cells or stop them from growing.
-

What happens after treatment?

After treatment, your doctor will check you every so often to see if the cancer comes back.

Regular follow-up tests include exams, blood tests, and imaging tests. Your doctor will also do regular follow-up blood tests to check your thyroid hormone levels.

You should also watch for the symptoms listed above. Having those symptoms could mean your thyroid cancer has come back. Tell your doctor or nurse if you have any symptoms.

What happens if my thyroid cancer comes back or spreads?

If your thyroid cancer comes back or spreads, you might have more surgery, radioactive iodine treatment, external-beam radiation, or chemotherapy.

What else should I do?

It's important to follow all your doctor's instructions about visits and tests. It's also important to talk to your doctor about any side effects or problems you have during treatment.

Getting treated for thyroid cancer involves making many choices, such as what treatment to have. Always let your doctors and nurses know how you feel about a treatment. Any time you are offered a treatment, ask:

- What are the benefits of this treatment? Is it likely to help me live longer? Will it reduce or prevent symptoms?
 - What are the downsides to this treatment?
 - Are there other options besides this treatment?
 - What happens if I do not have this treatment?
-

More on this topic

[Patient education: Thyroid nodules \(The Basics\)](#)

[Patient education: Radiation therapy \(The Basics\)](#)

[Patient education: Managing loss of appetite and weight loss with cancer \(The Basics\)](#)

[Patient education: Managing pain when you have cancer \(The Basics\)](#)

[Patient education: Medical care during advanced illness \(The Basics\)](#)

[Patient education: Thyroid nodules \(Beyond the Basics\)](#)

All topics are updated as new evidence becomes available and our [peer review process](#) is complete.

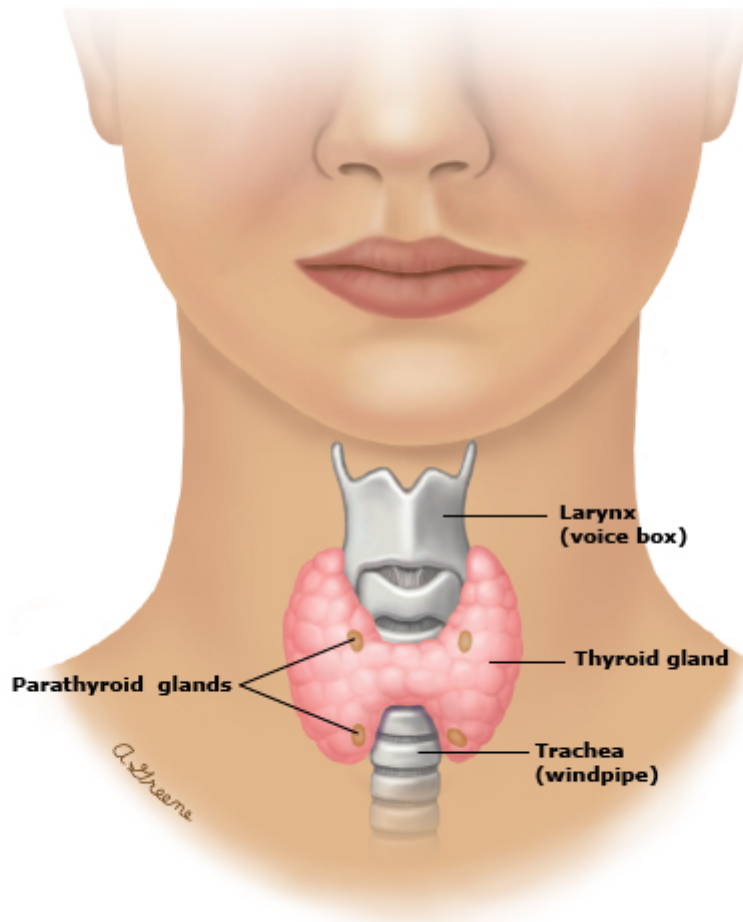
This topic retrieved from UpToDate on: Apr 21, 2020.

The content on the UpToDate website is not intended nor recommended as a substitute for medical advice, diagnosis, or treatment. Always seek the advice of your own physician or other qualified health care professional regarding any medical questions or conditions. The use of UpToDate content is governed by the [UpToDate Terms of Use](#). ©2020 UpToDate, Inc. All rights reserved.

Topic 82979 Version 6.0

GRAPHICS

Thyroid and parathyroid glands



The thyroid is a butterfly-shaped gland in the middle of the neck. It sits just below the larynx (voice box). The thyroid makes two hormones, called T3 and T4, which control how the body uses and stores energy. The parathyroid glands are four small glands behind the thyroid. They make a hormone called parathyroid hormone, which helps control the amount of calcium in the blood.

T3: triiodothyronine; T4: thyroxine.

Graphic 66834 Version 9.0