



Overview

Thyroid gland

Thyroidectomy is the surgical removal of all or part of your thyroid gland. Your thyroid is a butterfly-shaped gland located in the front of your neck. It makes hormones that control every part of your metabolism, from your heart rate to how quickly you burn calories.

Health care providers perform thyroidectomy to treat thyroid disorders. These include cancer, noncancerous enlargement of the thyroid (goiter) and overactive thyroid (hyperthyroidism).

How much of your thyroid gland is removed during thyroidectomy depends on the reason for the surgery. If you need only part of your thyroid removed (partial thyroidectomy), your thyroid may work normally after surgery. If you need your entire thyroid removed (total thyroidectomy), you need daily treatment with thyroid hormone to replace your thyroid's natural function.

Why it's done

Your doctor may recommend thyroidectomy if you have conditions such as:

- **Thyroid cancer.** Cancer is the most common reason for thyroidectomy. If you have thyroid cancer, removing most or all of your thyroid will likely be a treatment option.
- **Noncancerous enlargement of the thyroid (goiter).** Removing all or part of your thyroid gland may be an option for a large goiter. A large goiter may be uncomfortable or make it hard to breathe or swallow. A goiter may also be removed if it's causing your thyroid to be overactive.
- **Overactive thyroid (hyperthyroidism).** In hyperthyroidism, your thyroid gland produces too much of the hormone thyroxine. Thyroidectomy may be an option if you have problems with anti-thyroid drugs, or if you don't want radioactive iodine therapy. These are two other common treatments for hyperthyroidism.



Adult & Paediatric Ear, Nose and Throat Surgeons

- **Suspicious thyroid nodules.** Some thyroid nodules can't be identified as cancerous or noncancerous after testing a sample from a needle biopsy. If your nodules are at increased risk of being cancerous, you may be a candidate for thyroidectomy.

Risks

Thyroidectomy is generally a safe procedure. But as with any surgery, thyroidectomy carries a risk of complications.

Potential complications include:

- Bleeding. Sometimes bleeding can block your airway, making it hard to breathe.
- Infection.
- Low parathyroid hormone levels (hypoparathyroidism). Sometimes surgery damages the parathyroid glands, located behind your thyroid. The parathyroid glands regulate calcium levels in the blood. If blood calcium levels are too low, you may experience numbness, tingling or cramping.
- Permanent hoarse or weak voice due to nerve damage to the vocal cords.

How you prepare Medications and food

If you have hyperthyroidism, your health care provider may prescribe medication such as iodine and potassium solution. Medication will help control your thyroid function and lower the risk of bleeding after surgery.

To avoid anaesthesia complications, you may need to avoid eating and drinking for a certain amount of time before surgery. Your health care provider will give you specific instructions.

Other precautions

Before the day of your surgery, ask a friend or loved one to help you get home after the procedure. Be sure to leave jewellery and valuables at home.

**Adult & Paediatric Ear, Nose and Throat Surgeons**

What you can expect Before the procedure

Surgeons typically perform thyroidectomy using general anaesthesia, so you won't be awake during the procedure. The anaesthesiologist or anaesthetist gives you an aesthetic medication as a gas — to breathe through a mask — or injects a liquid medication into a vein. After you are unconscious, a breathing tube will be placed in your trachea to assist breathing throughout the procedure.

The surgical team places several monitors on your body to check your heart rate, blood pressure and blood oxygen level throughout the procedure. These monitors include a blood pressure cuff on your arm and heart-monitor leads attached to your chest.

During the procedure

Once you're unconscious, the surgeon makes a cut (incision) low in the centre of your neck. It can often be placed in a skin crease where it will be hard to see after the incision heals. All or part of the thyroid gland is then removed, depending on the reason for the surgery.

If you're having thyroidectomy because of thyroid cancer, the surgeon may also examine and remove lymph nodes around your thyroid. In some patients, the surgeon uses special equipment to monitor irritation of vocal cords during the procedure to prevent permanent damage. Thyroidectomy usually takes 1 to 2 hours. It may take more or less time, depending on the extent of the surgery.

After the procedure

After surgery, you're moved to a recovery room where health care providers monitor your recovery from the surgery and anaesthesia.

Some people may need to have a drain placed under the incision in the neck. This drain is usually removed the day after surgery.

After thyroidectomy, some people may experience neck pain and a hoarse or weak voice. These symptoms typically last for only a short time. They may be due to irritation from the breathing tube inserted into the windpipe during surgery, or the result of nerve irritation caused by the procedure. In some cases, the hoarseness or weakness is caused by permanent damage to the vocal cords.

**Adult & Paediatric Ear, Nose and Throat Surgeons**

You'll be able to eat and drink as usual after surgery. Depending on the type of surgery you had, you may be able to go home the day of your procedure or stay overnight in the hospital.

When you go home, you can usually return to your regular activities. Wait at least 10 days to two weeks before doing anything strenuous, such as heavy lifting or high-impact sports.

It takes up to a year for the surgical scar to fade. Your doctor may recommend using sunscreen to make the scar less visible.

Results

The long-term effects of thyroidectomy depend on how much of the thyroid is removed.

Partial thyroidectomy

If only part of your thyroid is removed, the remaining portion typically takes over the function of the entire thyroid gland. So you might not need thyroid hormone therapy.

Complete thyroidectomy

If your entire thyroid is removed, your body can no longer make thyroid hormone. Without medication, you'll develop symptoms of underactive thyroid (hypothyroidism). These symptoms may include dry skin, fatigue and weight gain. You'll need to take a pill every day that contains the synthetic thyroid hormone levothyroxine (Synthroid, Unithroid, others).

This hormone replacement is identical to the hormone normally made by your thyroid gland and performs all of the same functions. Your health care provider will test your blood to know how much thyroid hormone replacement you need.