



Thyroidectomy (surgery to remove all or part of the thyroid gland)

This information explains what happens during a thyroidectomy to treat or explore an overactive thyroid gland, benign nodules or suspicion of cancerous cells in the thyroid gland. Your surgeon will discuss with you the reason for recommending surgery, including the risks and benefits and whether all or just part of your thyroid needs to be removed.

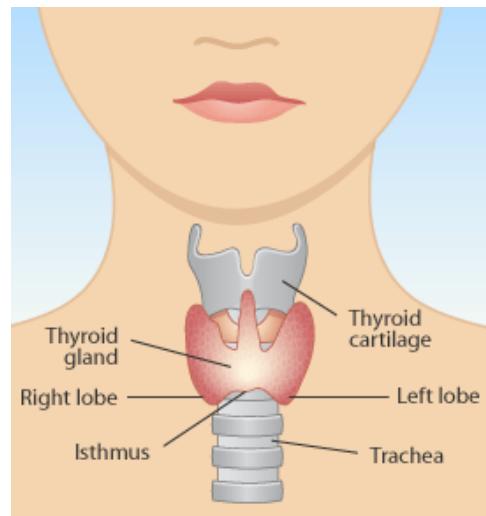
If you have any questions or concerns, please ask your surgeon.

What does the thyroid gland do?

The thyroid gland located in the throat, produces a chemical substance (a hormone) called thyroxine. This hormone circulates around the body in the blood and controls the speed at which the body's chemical processes work. The normal thyroid has considerable spare capacity for making thyroxine and so normally removal of as much as half of the gland can be undertaken without any need to give thyroxine replacement in the form of daily tablets after the operation. If, however, the whole thyroid has been removed, you will need to take thyroxine for the rest of your life.

Very close to the thyroid glands are four tiny glands called parathyroid glands, each not much bigger than a grain of rice. These produce a hormone which controls the level of calcium in your body.

The parathyroid glands are normally left in place when the thyroid gland is operated on but their function may be affected by the operation on the thyroid; there is more information about this later in this leaflet under the section entitled 'Low blood calcium levels'.



What does surgery involve?

Thyroidectomy is an operation in which the surgeon removes all or part of the thyroid gland. Access to the thyroid requires that the surgeon makes an incision in the neck. This is made a couple of finger breadths above the top of the breastbone. It is made in a skin crease or following the 'grain' of the skin. This is called a 'collar incision'. Most thyroidectomy incisions heal to produce a discreet scar. At the end of the operation the surgeon may consider it appropriate to leave a small 'drain' in the neck. This is a small tube used to drain fluid or blood from a wound. This will normally be removed on the first or second day after surgery. In some thyroid operations it is necessary to remove some of the lymph glands (small organs in that produce the white blood cells needed for the body to fight infection) from the neck. The absence of these glands does not normally produce any problems; if your surgeon expects to remove lymph glands he/she will have discussed this with you.

How long will I be in hospital?

You will attend hospital either the day before, or on the morning of, the operation. This will be confirmed in a letter from the waiting list office, even if you have already been given a date by the surgeon. The operation is done under a general anaesthetic (you will be asleep during the surgery) and takes about 90 minutes. You will be kept in for an overnight stay afterwards and most people then go home the next day.

Are there alternatives to surgery?

Your surgeon will discuss different treatment options with you, depending on your individual case. Patients with enlarged thyroid glands often have surgery for cosmetic reasons, or to relieve the pressure symptoms in the neck. If left untreated, the thyroid may enlarge and become unsightly and/or even more uncomfortable. If a patient with hyperthyroidism (overactive thyroid gland) does not wish to have surgery, the alternative is to have radioactive iodine or long-term drug treatment.

If you choose not to have an operation then even a benign swelling can grow and sometimes cause uncomfortable symptoms; however, your GP can monitor these if necessary.

Where there is concern about a possible cancerous nodule within the thyroid gland sometimes there is no alternative to surgery in order to get a definitive answer for you.

Risks and possible complications

Most thyroid operations are straightforward and associated with few problems. However, all operations carry risks which include post-operative infections (e.g. in the wound or chest), bleeding in the wound and miscellaneous problems due to the anaesthesia but these are very rare. Bleeding in the wound can be a serious problem if it occurs but the chance of a significant bleed needing you to return to the operating theatre within a day or two after your operation is small (in the region of 1 in 50 or less).

- **Scarring**

The scar may become relatively thick for a few months after the operation before fading to a thin line. Very rarely, some patients develop a thick exaggerated scar (called a keloid scar) but this is uncommon.

- **Voice change**

It is virtually impossible to operate on the neck without producing some change in the voice; fortunately, this is not normally detectable. A specific problem related to thyroid surgery is injury to one or both of the recurrent laryngeal nerves. These nerves pass close to the thyroid gland and control movement of the vocal cords. Injury to these nerves causes hoarseness and weakness of the voice. The nerve may not work properly after thyroid surgery due to bruising of the nerve but if this should occur it recovers over a few weeks or months. Rarely, the nerve may be permanently injured and the function will not recover. The external laryngeal nerve may also be injured and this results in a weakness in the voice although the sound of the voice is unchanged. Difficulty may be found in reaching the high notes when singing, the voice may tire more easily, and the power of the shout be reduced. Careful surgery reduces the risk of permanent accidental injury to a very low level but cannot absolutely eliminate it. Injury to both recurrent laryngeal nerves is extremely rare but is a serious problem and may require a tracheostomy (tube placed through the neck into the windpipe).

- **Low blood calcium levels**

Patients undergoing surgery to the thyroid gland are at risk of developing a low calcium level if the four tiny parathyroid glands which control the level of calcium in the blood stop working after the operation. It is normally possible to identify and preserve some if not all of these glands and so avoid a long term problem.

Unfortunately, even when the glands have been found and kept they may not function.

The risk of you needing long-term medication because of a low calcium level is small (about 1 in 50).

Note: If you search the Internet for information on this subject you should remember that some sites will describe calcium levels using different units of measurement. Additionally, many sites are in effect advertising for patients and may propose untried or non-standard procedures and treatment, so beware and discuss what you read with your doctors.

- **Loss of thyroid function**

If it has been decided to remove all of the thyroid gland, then you will require lifelong replacement of thyroxine. Fortunately, this is a straightforward once-a-day regimen with little requirement for adjusting dosage. There is a prescription charge exemption for patients requiring thyroxine tablets so you will not have to pay for these (or any other tablets as the law currently stands). If most, but not all, of the thyroid gland is removed then in the early weeks after the operation the remaining thyroid may not produce enough thyroxine and you may require replacement tablets temporarily until the retained thyroid produces enough hormone itself. This will be monitored.

- **Swallowing difficulty**

Usually swallowing is improved following thyroid surgery, especially for large goitres (big thyroid glands/nodules within the gland) or those which have extended down into the chest but occasionally some mild difficulty may develop or be persistent. Similarly, if you are experiencing any difficulty with your breathing before the operation, this may also be eased.

- **Eye problems**

If you have trouble with your eyes as a consequence of an overactive thyroid gland, then there is a slight risk of this worsening after the operation.

- **No change**

Very rarely, the operation may not cure the overactive thyroid gland (if that is what you are having surgery for).

We wish to emphasise that the potential risks and complications mentioned above are unusual but we believe it is essential to tell you about these rather than have you develop a complication without having been forewarned. If you are unclear about any of the information covered in this leaflet or if you are unclear about any other details of your operation, please ask your surgeon. It is important to remember that once you have made a decision about treatment, you can change your mind at any time, even after you have signed the consent form.

Further information

Watch a video on total thyroidectomy surgery on
<https://youtu.be/LCkOygXkSdU>



Watch a video on hemi-thyroidectomy on <https://youtu.be/q-aOdjp1nLA>



Please give feedback on how useful you found these videos by completing this pre-operative online survey



Contacting us

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Your consent

I confirm I that I have read the above and have discussed any queries with the surgical team.

Name: _____

Signature: _____

Date: _____

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Please ask if you need this information in another language or format.