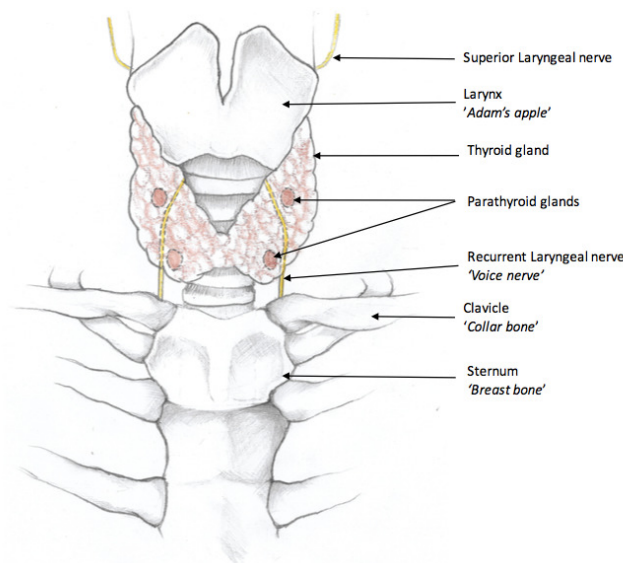


Patient Information Leaflet T1

What is the Thyroid gland and what does it do?

The thyroid gland is a butterfly shaped organ that sits in the neck in front of the windpipe below the Adams Apple. It consists of two halves (left and right lobes) joined by a central bridge (isthmus).

In healthy adults each lobe, left and right, measures around 3-4cm in height, 1-2cm in width and 1-1.5cm in depth. An adult thyroid gland weighs around 25g. The thyroid gland secretes a hormone known as Thyroxine. Thyroxine controls the body's metabolism, which is vital for normal health.



Reasons why patients may need thyroid surgery

Thyroid surgery involves removing part or all of the thyroid gland, and may be performed for the following reasons

- **Increase in the size of the thyroid gland**

- Any increase in size of a thyroid gland, from any cause, is called a goitre

- Growth of the thyroid gland may cause compression on the windpipe (trachea) or the gullet (oesophagus). In this scenario your surgeon may recommend thyroid surgery
- Even in the absence of pressure from a goitre on neighbouring structures, the presence of an enlarged thyroid gland can occasionally cause discomfort or its appearance may be troubling to patients. In this scenario patients should discuss the benefits and risks of surgery with their surgeon.

• Development of a lump (nodule) in the gland

- Nodules in the thyroid gland may consist of one (solitary nodule) or more (multi-nodular goitre) lumps
- Nodules are commonly assessed by clinical examination, ultrasound examination, needle biopsy or all three tests
- If your surgeon is concerned about the findings from one or more of these tests they may recommend surgery
- Occasionally other scans e.g. a CT scan, may also be necessary to help your surgeon plan an operation
- The older you are, the more likely you are to develop a thyroid nodule. Nodules are seen in 50% of women and 30% of men after the age of 50.

• Over-active thyroid gland

- An over-active thyroid gland secretes too much thyroid hormone. This is called hyperthyroidism (or thyrotoxicosis) and results in a well-recognised pattern of symptoms. It is diagnosed by a physical examination and blood tests.

What type of thyroid operation should I expect?

The following is a general overview of thyroid surgery operations. Your surgeon will explain which one you are advised to consider and why.

- Thyroid lobectomy - this removes one thyroid lobe and also the thyroid isthmus. Some surgeons may call this a hemithyroidectomy.

- Total thyroidectomy - this removes all the thyroid gland, leaving no thyroid tissue behind. Occasionally, for surgical reasons, your surgeon may leave a very tiny amount of thyroid tissue behind. This is called a near total thyroidectomy and is done to protect important structures that run very close to the thyroid gland in the neck. The amount left behind is small and you should consider that the whole of the gland has been removed.
- Subtotal thyroidectomy - this is a historic operation that is now rarely recommended. In this procedure, surgeons leave behind a remnant of each thyroid lobe. It results in an unacceptable rate of recurrence of symptoms and no longer advised in routine thyroidectomy.

What is lymph node surgery and when is it needed?

Lymph nodes drain a natural fluid called lymph that is produced by many tissues in the body. In patients who have a diagnosis of thyroid cancer, the lymph nodes around the thyroid gland are sometimes removed as part of the cancer operation. If cancer is found in the lymph nodes this can affect the type of ongoing treatment you receive after surgery.

Sometimes only the lymph nodes close to the thyroid gland are removed. This operation is called a central neck dissection as the lymph glands in the centre of the neck are removed. Performing a central neck dissection does not usually affect the size of the scar. Sometimes it is necessary to remove lymph glands from the side of the neck. This is a more involved operation requiring a longer scar and is called a lateral neck dissection. If you need this type of surgery, your surgeon will explain it to you in detail and discuss why it is necessary in your case.

Note: not all patients with a diagnosis of thyroid cancer will need lymph node surgery. Your surgical team will make this decision based on a number of factors which will be discussed with you. Lymph node surgery can carry an increased risk of complications. These are discussed in our leaflet Potential Complications of Thyroid Surgery which can be found on our website (www.baets.org.uk).

What will happen prior to surgery?

If you are on regular medications you should continue these (including any thyroid related tablets) unless advised otherwise. Some surgeons may ask you to stop taking medicines such as aspirin, dipyridamole (Persantin) or clopidogrel (Plavix) in the days leading up to your operation. If you are on any of these tablets, discuss this with your surgeon.

Patients on blood-thinning tablets (such as warfarin, rivaroxaban or dabigatran) should inform their surgeon as it is important that the conditions these are used to treat are controlled before and after surgery.

Many hospitals have a pre-operative assessment clinic where you will be reviewed by a nurse in preparation for your forthcoming operation. They will be able to advise if you have any queries relating to your medications leading up to your surgery. They will arrange for you to have any tests that are necessary for your anaesthetic and thyroid operation.

It is recommended that you have an examination of your vocal cords before surgery. The most common method used is known as flexible nasendoscopy. This entails passing a narrow flexible tube through your nose to permit inspection of your vocal cords. It may be a little uncomfortable but takes less than a minute to perform. Flexible nasendoscopy is performed with either no or a very small amount of a local anaesthetic spray. This may be carried out by your surgeon in clinic or by another doctor within the hospital. It is recommended that this is repeated after your surgery either before discharge or at your first outpatient follow-up appointment.

How long will I be in hospital?

This depends very much on the exact diagnosis and the operation being performed. Some surgeons may perform certain thyroid operations as day case procedures, but typically, patients stay in hospital overnight and are discharged the day following surgery. In some instances you may stay in hospital for longer. Your surgeon will advise you.

Care of your wound

When you are discharged from hospital you can expect to be given advice about care of your wound from the ward staff. The method used to close your incision varies between surgeons. Most techniques of closure require little or no dressing but your surgeon will advise as appropriate. Some surgeons advise that the wound is covered by a dressing and that this can usually be removed after 48 hours unless you are told otherwise. You will usually be able to take a bath or shower 48 hours after your operation. Gently pat your wound dry rather than rub it. Your wound may be slightly raised and pink or red in the days following surgery. This will settle over time as it heals. Eventually the wound should become flat and pale but this may take several months. Unless suggested by your medical team, it is not advisable to rub any ointments or bio-oils onto the wound immediately after your surgery before the wound has had chance to heal. It is best to wait until you have been seen at the follow-up clinic and discuss with your surgeon if you wish to use such products.

How soon will I recover?

Thyroidectomy is not a particularly painful operation and pain relief is rarely necessary after 72 hours. It is important that you do not drive if on pain relieving medication. It is normal to feel tired following thyroid surgery and it may take up to a month before you feel you have your energy levels back. In some cases, if you are prescribed thyroid replacement tablets, recovery may take longer before you reach the correct dose of thyroid medicine. Your medical team will carry out blood tests to assess this. Following a thyroidectomy, some patients feel as though there is a lump in their throat as they swallow. This is common and will disappear in time. Before resuming driving you need to ensure that you can make an emergency stop without hurting your neck. You also need to be able to comfortably turn your neck to look around as you drive, for example, when you change lanes. You should inform your car insurance company that you have had a thyroid operation as different insurers may have their own rules about how long you should wait after an operation before you return to driving. Your return to work depends on the type of work you do and the operation you have had. You may be able to return to office-based work after one or two weeks and heavier work after four weeks. Your surgical team will advise you.

Will I need Thyroid replacement tablets after my operation?

This depends on which operation you have had performed.

Patients who have all the thyroid gland removed (total thyroidectomy or near total thyroidectomy) will need thyroid tablets postoperatively and this will be life long. Your surgical or medical team will start the tablets upon discharge following your thyroid operation and then check that you are on the correct dose by performing blood tests in the clinic. Occasionally these blood tests are performed and checked by your GP.

20% of patients who have half of their thyroid gland removed (lobectomy, also called a hemithyroidectomy) may ultimately require thyroid hormone treatment. This is decided by a blood test 6 weeks (not before) following your operation.

What are the possible complications of thyroid surgery?

The vast majority of patients have straightforward surgery and are discharged without complications. Your surgeon will discuss the benefits and potential complications of surgery with you in detail. Please feel free to ask any questions that are on your mind.

BAETS have a patient information leaflet, **Potential Consequences of Thyroid Surgery**, which can be found on our website (www.baets.org.uk).

The British Association of Endocrine & Thyroid Surgeons is indebted to the following patient organisations that have helped in the production of this leaflet

The British Thyroid Foundation

The British Thyroid Foundation is a charity dedicated to supporting people with thyroid disorders and helping their families and people around them to understand the condition. For support and more information about thyroid disorders please visit: www.btf-thyroid.org

The Butterfly Thyroid Cancer Trust

The Butterfly Thyroid Cancer Trust is the first national charity in the UK dedicated solely to the support of patients with Thyroid Cancer. For further information please visit: www.butterfly.org.uk

Disclaimer The advice in this leaflet is believed to be true and accurate at the time of going to press. Ultimately, the responsibility for obtaining informed consent from you for a surgical procedure lies with your surgical team and not with the British Association of Endocrine & Thyroid Surgeons (BAETS). BAETS cannot accept any legal responsibility for the contents of this leaflet which is produced in good faith.

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