NHS
The Leeds Teaching Hospitals
NHS Trust

Total thyroidectomy

Information for patients

This leaflet provides information on having a total thyroidectomy, reasons for the operation and alternatives to surgery. It discusses the risks of surgery and aftercare.

What and where is the thyroid gland?

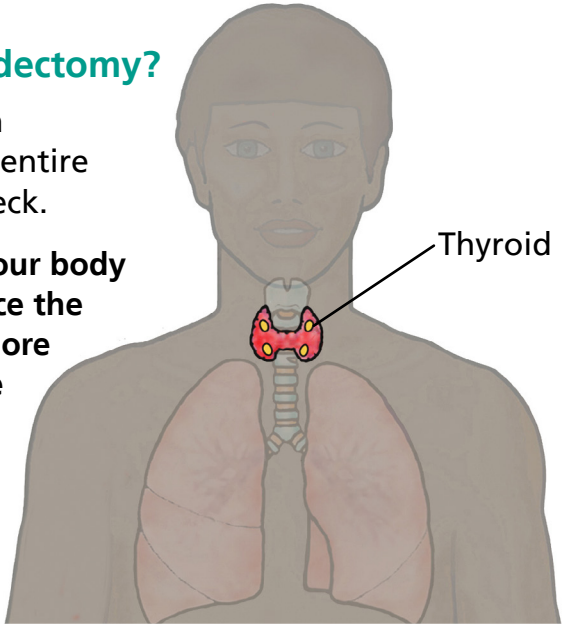
The thyroid gland is a butterfly-shaped gland found in your neck, in front of your windpipe. Its main job is to produce hormones, especially thyroxine.

Thyroxine helps control your metabolic rate. When the thyroid gland produces excess thyroxine, everything works too quickly. This is called an overactive thyroid or hyperthyroidism. An underactive thyroid gland produces too little thyroxine and this slows the body down.

What is a total thyroidectomy?

A total thyroidectomy is a procedure to remove the entire thyroid gland from the neck.

Following this surgery, your body will not be able to produce the hormone thyroxine anymore and you will need to take thyroxine tablets every day for the rest of your life.



What are the reasons for a total thyroidectomy?

There are many reasons why your surgeon may recommend removal of your whole thyroid gland. The most common reasons are:

- **Graves' disease** - overproduction of thyroxine due to auto-antibodies (the body's own immune system attacking the thyroid gland).
- **Goitre** - an enlargement of the thyroid which can cause swallowing and breathing problems due to pressure in the neck and chest.
- **Suspicious nodules** - nodules within the thyroid are very common but certain features on ultrasound can be suspicious for cancer. Biopsies can often help but sometimes they cannot prove either way whether a nodule is benign (non-cancerous) or malignant (cancer). Surgery is the only way to provide a definitive answer.
- **Cancer** - when biopsies have proven a thyroid nodule is a cancer, surgery is recommended to remove the thyroid gland.

What are the alternatives to surgery?

- **Graves' disease** - patients can be treated with anti-thyroid medication (e.g. carbimazole or propylthiouracil) or undergo radioactive iodine treatment to control the overproduction of thyroxine. Both these methods have risks including recurrent disease and medication side effects. Surgery provides a definite long term cure.

- **Goitre** - if a goitre is causing no symptoms and does not look worrying on scans, then surgery may not be indicated. If you subsequently develop breathing or swallowing symptoms, then surgery can be reconsidered.
- **Suspicious nodules** - National and international guidelines advise a diagnostic thyroid surgery for all suspicious nodules. For biopsy proven malignant nodules this is a curative procedure. There are some patients who are not fit for surgery, or who decline surgery. For these patients, nodules can be monitored with repeat ultrasound. However, it is important to understand that an ultrasound can only provide limited information about change in size, appearance or the underlying nature of the thyroid nodule.
- **Cancer** - surgery provides the only definite chance of cure in thyroid cancer.

How is surgery performed?

A total thyroidectomy is performed under a general anaesthetic which means you will be completely asleep for the procedure. The thyroid gland is removed through a horizontal cut in your neck. Some patients who are having surgery for thyroid cancer may need to have some of the lymph nodes around the thyroid gland removed too (known as a 'central neck dissection'). Your surgeon will let you know if this will be necessary. Once surgery is complete, your wound will be closed with stitches (normally dissolvable) before you wake up.

Rarely patients require a drain (plastic tube) in their neck but this is normally removed the day after surgery.

What are the potential risks?

All surgery carries potential risks but these are generally low in thyroid surgery.

1. General risks

- **Bleeding** - there is a small risk of bleeding with any surgery. The chance of a large blood loss requiring a blood transfusion after thyroidectomy is very low. Occasionally people bleed in their neck after surgery causing swelling (haematoma). Although this is rare, if it occurs patients will need to go back to theatre urgently to stop the bleeding.
- **Infection** - any surgery carries a risk of wound infection or chest infection but these are both quite uncommon after thyroid surgery.
- **Deep Vein Thrombosis (DVT)/Pulmonary embolism (PE)** - patients having a general anaesthetic are at risk of developing blood clots in their legs (DVT) or lungs (PE). To reduce this risk you will be given special stockings and calf compression devices whilst in hospital and are advised to keep active.
- **Scarring** - most scars in the neck heal well and are barely visible after a few months. However some people are prone to developing thickened and bumpy scarring called keloid. If you have had problems with keloid scarring in the past it is important to let your surgeon know before surgery.

2. Specific risks

- **Low calcium** - There are four tiny glands called parathyroids which are adjacent or attached to the thyroid. These glands control calcium levels in your blood.

  During thyroid surgery, these glands are at risk of being damaged which can result in low calcium levels. You will have blood tests to check your calcium on the night of surgery and the following day. Some patients may need to take calcium and/or Vitamin D tablets after surgery but the majority will be able to stop them within a few days or weeks. Rarely patients may have to take calcium and/or Vitamin D tablets lifelong due to permanent damage to the parathyroid glands.

- **Damage to recurrent laryngeal nerve** - the nerves that control your vocal cords lie behind your thyroid gland, one on each side of the neck. During a total thyroidectomy these nerves have to be carefully separated from the thyroid which could result in damage leading to changes in your voice, swallowing and breathing.

  The chance of permanent damage to the nerve is very low (less than one in 100 patients). Approximately five in 100 patients will notice a temporary change to their voice that lasts a few weeks or months due to bruising or stretching of the nerve. Occasionally patients notice subtle voice changes even without evidence of nerve damage.

- **Swallowing problems** - following thyroid surgery some patients experience temporary trouble with swallowing. This usually improves with time.

- **Tracheostomy** - there is a very rare risk that if both nerves to the vocal cords are damaged during surgery, the vocal cords stop moving and so could block your wind pipe. You would then struggle to breathe and may require a tracheostomy (breathing tube through the neck into the wind pipe). By using a nerve monitor during your surgery we would hopefully be able to avoid this. If the nerve on one side of your neck stopped working we may decide to not remove the thyroid lobe on the opposite side to avoid the risk of both nerves being damaged and therefore the need for a tracheostomy.
- **Sternotomy** - A goitre may grow down into the chest causing breathing or swallowing difficulties.

  This is called a retrosternal goitre. The majority of retrosternal goitres can be removed through a cut in the neck. However if the goitre is very large it may not be possible to remove through the neck alone and a sternotomy (opening the chest with a vertical cut) is also required. If this is a possibility it will have been discussed with you by your surgeon prior to your operation.

  After a sternotomy you will usually stay in hospital for 2-3 days and may have a drain into your chest. You should not do any heavy lifting or pulling through your arms for at least 12 weeks following your surgery.

What happens on the day of surgery?

Patients having a total thyroidectomy are usually admitted on the day of their operation.

Before your surgery you will be contacted by the hospital to confirm your instructions for day of admission including time of arrival to hospital, where you need to go and when you must stop eating and drinking.

On the day of the operation you will be seen by the surgeon who will explain the surgery again. If you haven't signed a consent form before, you will be asked to sign it on the day. You will also be seen by the anaesthetist who will discuss the anaesthetic with you. If you have any further questions at this time, it is important you ask them now.

Your operation will take between 2-3 hours to be performed. After the procedure you will wake up in the recovery area, also known as PACU (Post Anaesthetic Care Unit). Here, specially trained nurses will monitor your recovery from surgery with regular checks on your breathing, heart rate and blood pressure as well as your wound. When you are well enough, you will be moved to the ward area.

You will normally be able to eat and drink once you are awake enough, unless the surgeon has given specific instructions. Family and friends can normally visit the evening of surgery.

What happens after surgery?

Following surgery you will remain on the ward overnight for on-going monitoring. You will have blood tests that evening and the following morning to check your calcium levels. If these are low you may be started on calcium and/or Vitamin D tablets.

The day following surgery you will be started on levothyroxine tablets. Your surgeon will calculate this dose. If you were taking any medications for an overactive thyroid e.g. carbimazole or propylthiouracil prior to surgery these will stopped before you are discharged home.

When will I go home?

The majority of patients will go home the day after surgery but sometimes it is necessary to keep patients in hospital longer. Reasons for this may be other medical problems, monitoring of blood tests or for social reasons.

Wound care after discharge

Your wound is closed with a dissolvable stitch and protected with skin glue and Steri-Strips. You can have a shower after your operation and pat the wound dry. You should avoid soaking your dressings and swimming is not advised for at least two weeks after surgery.

The Steri-Strips can be removed from your wound after a week. You may notice the ends of the stitches sticking out from either end of your wound. After two days these can be trimmed by yourself or left until review in clinic by your surgeon.

If you are concerned about any swelling or redness to the wound after discharge from hospital you can call Ward J23 (0113 206 9123) or J84 (0113 206 9184) day or night for advice. Alternatively, you can see your GP.

Blood tests after surgery

Some patients may be asked to attend Ward J23 (Level 1 Chancellor Wing at St James's University Hospital, Leeds) a few days after surgery for a blood test to check their calcium levels. **You will be advised about this prior to discharge.**

If you experience any tingling to your fingers or around your mouth once you go home, it could be a sign that your calcium levels have dropped. Please contact Ward J23 (0113 206 9123) for advice. You may be required to attend the Ward urgently for a blood test to check your calcium levels.

When will I be seen in clinic?

Most patients will be seen in clinic four weeks after discharge from hospital. Sometimes the appointment date will be given to you prior to leaving the ward but it is more likely you will receive this through the post or via text message.

Please contact Ward J23 on telephone number: 0113 206 9123 if you have not been offered an appointment within four weeks of your operation.

When can I go back to work/normal activity?

Most patients are well enough to return to work two weeks after surgery. **It is advisable not to drive for a few days after surgery and to inform your insurance company for specific limitations.** If you require a sick note for work, please let the team know during your admission.

Further information

Total thyroidectomy is a common operation performed regularly with relatively few risks.

Please consider how the benefits and potential risks of surgery might affect you as an individual including your occupation and/or hobbies. We are always happy to discuss this with you in detail.

For further information please contact your medical team.

Further information can be found on the following websites:

www.baets.org.uk

British Association of Endocrine and Thyroid Surgeons

www.btf-thyroid.org

British Thyroid Foundation

www.amend.org.uk

Association for Multiple Endocrine Neoplasia Disorders

What did you think of your care?

Visit: www.leedsth.nhs.uk/patients/support/feedback-complaints/friends-family-test/

Scan or click the QR code - Your views matter

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