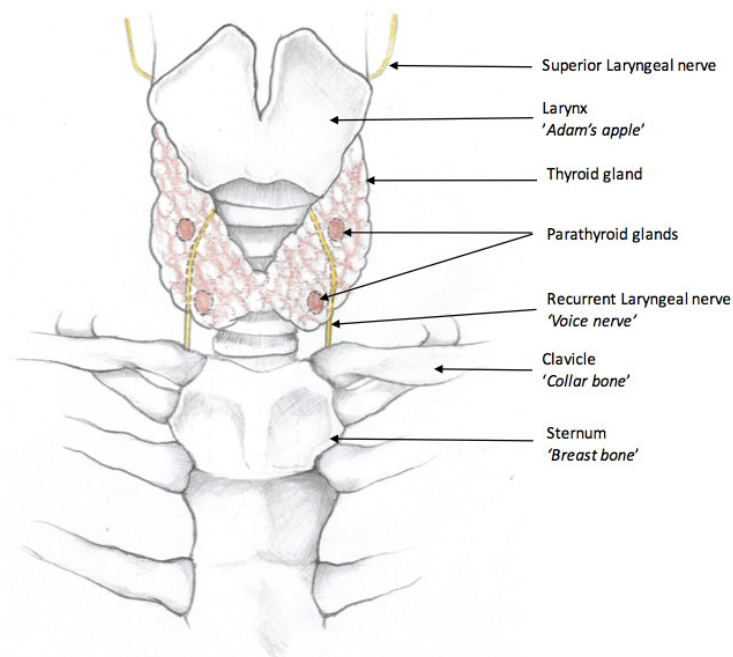


## Patient Information Leaflet T2

### POTENTIAL CONSEQUENCES OF THYROID SURGERY

Thyroid surgery is generally a safe procedure. The vast majority of patients undergoing an operation on the thyroid gland have no complications. However, as with any surgical procedure, there are some risks associated with the operation and these should be fully explained to you by your surgical team.



Complication rates for thyroidectomy are Surgeon specific. You should not be shy in asking your surgeon what their personal complication rate is. All Thyroid Surgeons should be entering their data into the national UKRETS database. This is recommended for all Thyroid Surgeons in England and mandatory for all BAETS members. Data entry is GDPR compliant and more information on the BAETS audit is found on the patient section of the website.

Surgical outcomes can be found by visiting the **Surgeon Specific Outcome Reports for Endocrine Surgery** at the audit page on the BAETS website ([www.Baets.org.uk](http://www.Baets.org.uk)) together with annual deanonymised data on number of Thyroidectomies performed.

## **VOICE CHANGES**

There are three possible reasons for such changes to occur:

### **Injury to the recurrent laryngeal nerve(s)**

There are two recurrent laryngeal nerves, one on each side of the neck. They pass behind the thyroid gland and into the larynx (voice box) where they control movements of the vocal cords. Damage can occur to one (unilateral) or both (bilateral) nerves and the damage can be temporary or permanent. Damage to a nerve is called a palsy

If “bruised”, the nerve does not work properly immediately after surgery but recovers and should return to normal function during the next few days or weeks. Sometimes, however, it can take up to 12 months for the nerve to recover. Permanent damage to one of these nerves usually causes a hoarse, croaky and weak voice. The voice box usually adapts to the damage and symptoms often improve with time. It is recommended that early treatment for a nerve injury should take place. Speech therapy and in some instances a vocal cord injection may be recommended by your surgeon. Permanent damage to one or both nerves is more uncommon.

Significant injury to both laryngeal nerves although uncommon is a serious problem that may require placement of breathing tube (tracheostomy) in the neck. In time, removal of the breathing tube is ultimately achieved in most instances.

### **Injury to superior laryngeal nerve(s)**

These fine nerves travel close to the blood vessels that feed the thyroid gland and control the tension of the vocal cords. Damage to these nerves may result in a change to the pitch of your voice. This might result in a difficulty in reaching high notes when singing, the voice can tire more easily and you might not be able to shout loudly.

### **Non-specific voice changes**

30% of patients may experience voice change up to 3 months following thyroidectomy without any recognizable nerve injury. Fortunately such voice change is not usually a problem for patients and recovery ultimately occurs. You might find your voice is slightly deeper and experience voice fatigue. This is significant mainly for those who use their voice for professional reasons. Voice changes are more likely to occur in people who have surgery on a very large thyroid gland or have been operated on for cancer.

Nerve injury and voice changes are more likely to occur in patients undergoing:

- Surgery for cancer
- Lymph node surgery
- Surgery for a large thyroid (goitre)
- Revision thyroid or lymph node surgery

### **LOW CALCIUM LEVELS**

There are four parathyroid glands, two on each side of the neck, each about the size of a grain of rice and tightly attached to the thyroid gland. They are involved in regulating calcium level in the blood. It is normally possible for the surgeon to identify and save some or all of these glands and so avoid a long-term problem. However, during thyroid surgery the parathyroid glands can be bruised or damaged.

Even when the glands have been saved they may not work properly for several weeks following surgery. Because of this your calcium levels might drop and you might experience tingling in the fingers and lips ('pins and needles').

Some surgeons prescribe a short course of calcium tablets to all patients who have had thyroid surgery. Other surgeons only prescribe calcium to some patients after surgery. Your surgeon will advise you accordingly.

There is a risk that you might need calcium or vitamin D tablets on a long-term basis. The risk of low calcium levels post-operatively is higher in patients who have surgery for:

- an over-active thyroid gland such as Graves' disease
- thyroid cancer
- lymph node surgery

### **BLEEDING AFTER THE OPERATION**

This is an uncommon complication that can lead to neck discomfort or, in more severe cases, breathing difficulties. Occasionally, patients will need to return to operating theatre and have further surgery to have the neck explored so that the cause of bleeding can be dealt with.

### **NECK NUMBNESS**

Some patients may experience numbness around the thyroid surgery scar after their operation. This usually settles with time.

### **SWALLOWING DIFFICULTIES**

Swallowing can be improved after thyroid surgery, especially in patients who have large goitres. Occasionally, some mild difficulty in swallowing may develop after the operation. This is almost always temporary until the post-operative swelling settles. If you still have difficulty swallowing after some weeks you should discuss this with your surgeon.

### **SCAR**

Sometimes the scar may be red for a few months after the operation before fading to a thin white line. It takes over a year or more for the scar to reach its final appearance. Some patients may develop a thick exaggerated scar which is unsightly but this is very rare.

### **WOUND INFECTION**

Infection is not common but if it occurs can be treated with antibiotics.

### **WOUND SWELLING**

Some degree of swelling around the wound is normal following any type of surgery including thyroid operations.

Occasionally, there can be a collection of fluid behind the thyroid surgery scar. This fluid is called a seroma and is part of the body's response to surgery. If there is a particularly large seroma it can be

simply drained with a needle and syringe in the clinic. This is not always required.

### **THYROID STORM**

This is an extremely rare complication caused when excessive amounts of thyroid hormone are released into the blood stream during surgery. This is seen in patients with an overactive gland where thyroid hormone levels have not been brought to normal prior to surgery. **ALL** thyrotoxic patients must have normal thyroid hormone levels at the time of surgery. This is achieved by medication before surgery.

### **RISKS OF GENERAL ANAESTHESIA**

Modern anaesthesia is very safe and serious problems are uncommon. All anaesthetists in the UK are fully qualified doctors with specialist training. It is not uncommon after an anaesthetic for some patients to feel sick and for some to vomit. Certain people are more prone to this problem, and your anaesthetist will give you medication that decreases the chance of this happening. Other problems that can occur include sore throat, dizziness, blurred vision, headache, itching, aches, pains and backache. These problems tend to get better within a few hours of waking up.

Less common problems include development of a chest infection (particularly in those who already have chest complaints), muscle pains, damage to teeth, lips or tongue, or the worsening of an existing medical condition. Very uncommon problems include damage to the eyes, drug allergy and nerve damage. The risk of awareness (remaining conscious) whilst under a general anaesthetic is very uncommon. When awareness does occur, it is typically for a short period prior to the operation commencing. It is extremely rare to be conscious during the operation. The risk to you as an individual will depend on whether you have any other illness, personal factors (such as smoking or being overweight) or surgery that is complicated, takes a long time or is done in an emergency.

Please discuss any pre-existing medical conditions with your anaesthetist. In certain situations your anaesthetist may want to see you a few weeks before your admission date to make sure there are no problems that need dealing with before your operation. For more

information about risks associated with your anaesthetic you can either contact your Anaesthetist through your surgical team or visit the Royal College of Anaesthetists website at [www.rcoa.ac.uk](http://www.rcoa.ac.uk).

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

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The British Thyroid Foundation For support and more information about thyroid disorders please visit: [www.btf-thyroid.org](http://www.btf-thyroid.org)

The Butterfly Thyroid Cancer Trust For further information please visit: [www.butterfly.org.uk](http://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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