The ROYAL MARSDEN
NHS Foundation Trust

Having an operation to remove all or part of the thyroid gland (thyroidectomy)

Head and Neck

Patient Information

NHS

Contents

Introduction

This leaflet explains your operation and answers commonly asked questions. If you have any concerns about your illness or your treatment, please talk to your surgeon or clinical nurse specialist (key worker).

What is the thyroid gland and what does it do?

The thyroid gland is located in the lower part of the neck just below the Adam's apple (or where it would be), and is shaped like a butterfly with two lobes laying either side of the windpipe. The thyroid gland produces thyroid hormones called thyroxine and triiodothyronine. These hormones regulate the speed at which your body cells work. If too much of the thyroid hormone is produced (**hyper**thyroidism), the body cells work faster than normal. If too little of the hormone is produced (**hypo**thyroidism), the body cells work more slowly.

What is a thyroidectomy?

A thyroidectomy is the removal of all (total) or part (partial) of the thyroid gland. You may need to have this operation because you have a swelling which could be cancerous or because your gland is overactive.

Why do I need a thyroidectomy?

Surgery is the recommended treatment for several disorders of the thyroid gland. Thyroid disorders that may require surgery include:

- A large thyroid, causing symptoms such as breathing or swallowing difficulties
- A solitary nodule
- Multi-nodular goitre (a goitre is an enlarged thyroid gland), if causing problems
- Thyroid adenoma (an adenoma is a clump of cells)
- Thyroid cancer
- Graves' disease (hyperthyroidism)
- A recurring thyroid cyst.

It is important that your surgery is performed by an experienced surgeon who regularly performs thyroid operations. Do not hesitate to ask the surgeon any questions that are on your mind.

We recognise your right to participate in decisions about such an important matter, and we will ask for your informed consent before surgery.

What happens before I come to hospital?

The doctors will discuss the surgery with you at your outpatient appointment. Please ask if you do not understand any terms they use. You will have the opportunity to see the clinical nurse specialist who will be your key worker and available for advice and further information.

You will also have a pre-operative assessment visit. This is usually one to two weeks before your planned admission for your operation.

During this assessment, a specialist assessment nurse will see you. They will discuss your general health with you, including any medicines you are currently taking. They will decide whether you need any tests before you have a general anaesthetic. You may also be seen by either the doctor or anaesthetist, or both if the nurse feels it is necessary. They will examine you and may listen to your heart and lungs.

Tests you may have include:

- Routine blood tests
- ECG (electrocardiogram or heart trace)
- MRSA skin test.

This appointment is also an opportunity to ask questions about your stay in hospital and to share any concerns you may have.

What happens during the operation?

The operation is performed under a general anaesthetic. Thyroid operations are usually straightforward. The main types of thyroid surgery are:

- Total thyroidectomy (removing all of the thyroid gland)
- Lobectomy or hemi-thyroidectomy (removing half of the thyroid gland)
- Subtotal thyroidectomy (removing most of the thyroid gland but leaving some tissue in place)
- Isthmusectomy (removal of central part of thyroid gland).

The incision is made through a crease in your neck. Many structures pass through the neck and during the operation the surgeon will take care to identify the various arteries, veins and nerves. Special attention is paid to the nerves that supply your voice box and the blood supply to the parathyroid glands, which control your calcium metabolism.

The thyroid gland has a very rich blood supply, and to avoid bleeding, the arteries are carefully tied off before removing the gland. After the part of the thyroid that needs to be removed has been taken out, the surgical site will be closed, and the incision will be sealed with stitches (sutures) and strips of sticky tape (steristrips or surgical glue). The stitches that we use are usually soluble. Small tubes are sometimes placed in the neck to drain away any extra fluid for the first 24-48 hours.

What can I expect after surgery?

After surgery you may feel a little uncomfortable, but this should soon pass. If there are no complications you will be ready to go home after a day or so. If there is significant bleeding within the wound you will need to be taken to theatre once more, but this is extremely rare and usually only happens within the first 12 hours.

Do I need to start taking thyroid replacement?

Having normal levels of thyroid hormone is essential for your health and wellbeing. If a total thyroidectomy is carried out, you will require lifelong treatment with a thyroid hormone (levothyroxine). Your GP will monitor this with regular blood tests.

If a partial or hemi-thyroidectomy is carried out, 20% of patients (20 in 100 patients) will require thyroid hormone treatment at some point in the future. Please contact your GP if you develop any signs of hypothyroidism such as increased fatigue, dry skin or constipation. You may require a blood test to check your thyroid hormone.

Can the operation affect my voice?

Your voice may sound a little hoarse immediately after surgery, but should return to normal within a couple of days. If the main nerve to the voice box is damaged, then your voice may sound husky or breathy or be slightly weaker than before. Usually the voice recovers within six months. When the damage is just on one side, the other vocal cord often takes over and restores a normal voice. Permanent problems arise in approximately one in 100 cases. Extremely rarely, a serious complication occurs whereby both nerves of the voice box are damaged. This can result in temporary or permanent injury which will require the placement of a breathing tube in the neck (trachoestomy).

If you have ongoing problems with your voice, there are operations available to help. You should ask to be referred to a speech therapy unit to see a surgeon who specialises in laryngeal surgery. A small operation can be performed to help correct the problem with the voice box.

Professional singers, public speakers, teachers and others who deal with young children may notice that it is harder to project their voice after surgery, and sometimes the voice may appear to ‘wobble’. This is because another nerve that supplies one small muscle in the voice box has been affected by the surgery.

This happens in about six cases in every 100, but usually recovers within four months of surgery. If there is temporary or permanent damage to the nerve, then speech therapy and a referral to a specialist voice unit can help. If you use your voice professionally, it is important that you discuss this fully with your surgeon before the operation.

Can the operation affect my parathyroids?

The parathyroid glands are four small glands the size of a grain of rice that are next to, or in some cases within, the thyroid. They control the calcium balance in your body. Your surgeon will make every effort to preserve these but sometimes one or more parathyroids are unavoidably removed, or stop working, resulting in hypoparathyroidism. Fortunately you do not need all four parathyroids, but sometimes it takes days, weeks, or even months after the operation for the remaining parathyroids to be able to completely control your calcium balance. This is because the parathyroids often get part of their blood supply from the thyroid and have to adjust to a slightly different blood supply after the operation.

If you experience a tingling sensation in your hands, fingers or around your mouth after surgery you must alert the medical staff - this is a sign that your calcium levels have dropped, usually as a result of a decreased blood supply or damage to one or more parathyroids and you will need urgent assessment. You will need to take calcium supplements and, if necessary, Vitamin D, to correct this. The parathyroid glands often recover their function within six to eight weeks. After total thyroidectomy, about one in 20 people may have permanent hypoparathyroidism and will need to take calcium and vitamin D for life.

What are the general surgical/anaesthetic risks of surgery?

- **Wound infection** – This rarely occurs (the risk is 1 in 200 patients) and is usually treatable with antibiotics.
- **Abnormal scar** – Surgical scars may become thickened and red to begin with before fading to a thin line. Some patients may develop a scar beyond the original incision (keloid) but this is very rare. They are more common in people with black and brown skin tones, such as people from Africa and African-Caribbean and South Indian communities.
- **Pain** – There is minimal pain after thyroid surgery. This is usually related to the breathing tube that is placed during the operation. The pain usually wears off after a day or so.
- **Numbness of the scar** – Some scar numbness can be permanent, but it mostly resolves.
- **Seroma** – Tissue fluid can cause a slight swelling under the scar at first. This goes away completely in the first few weeks after surgery.

How long will I need off work and should I avoid any types of exertion?

This will depend on the type of treatment you have had. However, we usually advise that you take at least two weeks off work. If you have a job which involves heavy lifting or you like to take vigorous exercise, please talk to your physiotherapist about when to start these activities again. Discuss with your surgeon when you can start driving again.

Can I shower or wash after my operation?

Yes, you can shower the first day after your operation. If your wound is closed with stitches and steristrips, you must avoid getting this area wet for one week. The underlying stitches will be removed in your follow up clinic with the surgeon around this time. If your wound is closed with surgical glue, you can get the area wet. Be sure to allow the wound to air dry.

Contact details

If you have any further questions about your surgery or post-operative recovery, please contact your clinical nurse specialist (CNS) or surgical team.

In normal working hours, you may contact:

Key Worker:	020 8661 3112 (direct line)
Head and Neck CNS:	HN-CNS@rmh.nhs.uk
Speech and Language Therapy Team:	020 8661 3038
Dietetics Team:	020 7808 2814

Alternatively, please call:

The Royal Marsden Macmillan Hotline: 020 8915 6899 (available 24 hours a day, 7 days a week)

Call us straight away if you are feeling unwell or are worried about the side effects of cancer treatments.

This service provides specialist advice and support to all Royal Marsden patients, as well as to their carers, and both hospital and community-based doctors and nurses caring for Royal Marsden patients.

Further information and support

Additional information is available from the following websites.

Macmillan Cancer Support

Website: *www.macmillan.org.uk*

Helpline: 0808 808 0000

ENT UK

Website: *www.entuk.org*

The British Thyroid Association

Website: *www.british-thyroid-association.org*

Butterfly Thyroid Cancer Trust

Website: *www.butterfly.org.uk*

Association for Multiple Endocrine Neoplasia Disorders (AMEND)

Website: *www.amend.org.uk*

Notes and questions

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References

This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:

The Royal Marsden Help Centre
Telephone: Chelsea 020 7811 8438 / 020 7808 2083
Sutton 020 8661 3759 / 3951
Email: patientcentre@rmh.nhs.uk

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Should you require information in an alternative format, please contact The Royal Marsden Help Centre.

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