Procedure Information Guide

Total thyroidectomy (for thyrotoxicosis)

Brought to you in association with EIDO Healthcare and endorsed by the Royal College of Surgeons England.

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You should not only depend on the information we have provided when you make any decisions about your treatment. The information is meant to act only as a guide to the treatment you are considering having. Please discuss any questions you may have about your treatment with your treating healthcare professional.

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What is the thyroid gland?

The thyroid gland is a structure in your neck that produces a hormone called thyroxine, which regulates your body's metabolism. Your surgeon has recommended a total thyroidectomy to remove all of the thyroid gland. However, it is your decision to go ahead with the operation or not.

About this document

We understand this can be a stressful time as you deal with different emotions and sometimes have questions after seeing your surgeon. This document will give you a basic understanding about your operation. We tell you about the things you can do to help make the operation a success. It is also important to remember to tell your surgeon about any medicine you are on so he or she can manage this, if necessary. It will also tell you about what to expect after the operation – while in hospital and in the long term. Your surgeon remains the best person to speak to about any questions or concerns you may have about the operation.

Why has a thyroidectomy been recommended?

Your thyroid gland has become overactive and is producing too many hormones. This is called thyrotoxicosis and can lead to some distressing symptoms such as losing weight, tremors, sweatiness, being unable to cope with heat, difficulty sleeping and eye problems. Surgery is the most effective treatment if the gland is enlarged, or if you have difficulty swallowing or breathing.

What are the benefits of surgery?

Your body will stop producing thyroid hormones so you should no longer have any distressing symptoms. You will need to take thyroxine tablets regularly for the rest of your life to make sure your body has the right amount of thyroid hormones.

Are there any alternatives to a total thyroidectomy?

Medicine, such as carbimazole or propylthiouracil, can be used to control thyroid activity and are often used to begin with. However, these have side effects and for some people should not be used. They may also fail to fully control your overactive thyroid gland. Radioactive iodine can also be used for some people.

It is possible to remove only part of the gland so that you continue to produce some thyroid hormones and do not need to start taking thyroxine tablets. However, your thyroid gland may become overactive or underactive in the future, and you may need further treatment.

What does the operation involve?

The healthcare team will carry out a number of checks to make sure you have the operation you came in for. You can help by confirming to your surgeon and the healthcare team your name and the operation you are having. The operation is performed under a general anaesthetic and usually takes 90 minutes to two hours. You may also have injections of local anaesthetic to help with the pain after the operation. You may be given antibiotics during the operation to reduce the risk of infection. Your surgeon will make a cut on your neck in the line of one of your skin creases. The cut is usually about 5 centimetres long (see figure 1).

Figure 1

A thyroidectomy

Your surgeon will remove the thyroid gland. They will stitch the deep tissues and close your skin to leave a neat scar. Your surgeon may insert a drain (tube) in your wound to drain away blood that can sometimes collect. The drain will usually be removed after one to two days.

What should I do about my medicine?

Let your doctor know about all the medicine you take and follow their advice. This includes all blood-thinning medicine as well as herbal and complementary remedies, dietary supplements, and medicine you can buy over the counter.
What can I do to help make the operation a success?
If you smoke, stopping smoking several weeks or more before the operation may reduce your risk of developing complications and will improve your long-term health. Try to maintain a healthy weight. You have a higher risk of developing complications if you are overweight. Regular exercise should help to prepare you for the operation, help you to recover and improve your long-term health. Before you start exercising, ask the healthcare team or your GP for advice.
You can reduce your risk of infection in a surgical wound.
• In the week before the operation, do not shave or wax the area where a cut is likely to be made.
• Try to have a bath or shower either the day before or on the day of the operation.
• Keep warm around the time of the operation. Let the healthcare team know if you feel cold.

What complications can happen?
The healthcare team will try to make the operation as safe as possible but complications can happen. Some of these can be serious and can even cause death. You should ask your doctor if there is anything you do not understand. Your doctor may be able to tell you what the risk of a complication for you is.

1 Complications of anaesthesia
Your anaesthetist will be able to discuss with you the possible complications of having an anaesthetic.

2 General complications of any operation
• Pain. The healthcare team will give you medicine to control the pain and it is important that you take it as you are told so you can move about and cough freely.
• Infection of the surgical site (wound) (risk: 1 in 50). It is usually safe to shower after two days but you should check with the healthcare team. Let the healthcare team know if you get a high temperature, notice pus in your wound, or if your wound becomes red, sore or painful. An infection usually settles with antibiotics but you may need another operation.
• Unsightly scarring of your skin, although the scar usually heals as a fine white line.
• Blood clot in your leg (deep-vein thrombosis – DVT). This can cause pain, swelling or redness in your leg, or the veins near the surface of your leg to appear larger than normal. The healthcare team will assess your risk. They will encourage you to get out of bed soon after the operation and may give you injections, medicine, or special stockings to wear. Let the healthcare team know straightaway if you think you might have a DVT.
• Blood clot in your lung (pulmonary embolus), if a blood clot moves through your bloodstream to your lungs. Let the healthcare team know straightaway if you become short of breath, feel pain in your chest or upper back, or if you cough up blood. If you are at home, call an ambulance or go immediately to your nearest casualty unit.

3 Specific complications of this operation
• Bleeding during or after the operation. This can cause you to be bruised or blood to collect in your wound (haematoma). Bleeding in your wound can be serious if it leads to swelling in your windpipe (trachea) (risk: less than 1 in 80). You may need another operation to stop the bleeding and remove the blood.
• Change in your voice. There are nerves in your neck that supply your voice box, running close to the thyroid gland. These can be damaged or stretched, causing a hoarse or weak voice, which usually gets better within a few weeks. You may get a permanent hoarse voice or difficulty in singing and shouting (risk: 1 in 100).
• Breathing difficulties, if there is damage to nerves on both sides of your neck, serious swelling around your neck or if your windpipe collapses. This is serious but rare. You may need a tracheostomy to place a breathing tube in your windpipe.
• Thyroid hormone levels in your blood will drop. You will need replacement treatment with thyroxine tablets and your blood levels will be monitored for life.
• Drop in calcium levels in your blood caused by bruising or removing the tiny parathyroid glands (see figure 1). A drop in calcium levels often does not cause symptoms, although you may feel muscle cramps and a tingling sensation around your mouth. You may need long-term calcium supplements (risk: 3 in 100).
• Thyroid hormone levels in your blood may increase (thyroid crisis). This can be life-threatening and needs emergency treatment.
How soon will I recover?

• **In hospital**
After the operation you will be transferred to the recovery area and then to the ward. You should be able to go home after one to two days. However, your doctor may recommend that you stay a little longer. If you are worried about anything, in hospital or at home, contact the healthcare team. They should be able to reassure you or identify and treat any complications.

• **Returning to normal activities**
To reduce the risk of a blood clot, make sure you follow carefully the instructions of the healthcare team if you have been given medicine or need to wear special stockings. You should be able to return to work and normal activities after about two weeks, depending on how much surgery you need and your type of work. It is normal to feel tired in the first few weeks, particularly in the afternoon. Regular exercise should help you to return to normal activities as soon as possible. Before you start exercising, ask the healthcare team or your GP for advice. Do not drive until your doctor tells you that you can.

• **The future**
Most people make a full recovery and can return to normal activities. The healthcare team will usually arrange for you to come back to the clinic within four weeks. The tissue that your surgeon removed will have been examined under a microscope. Your surgeon will tell you the results and discuss with you any treatment or follow-up you need. You will need replacement treatment with thyroxine tablets.

**Summary**
Thyrotoxicosis is a condition caused by an overactive thyroid gland. The symptoms can be distressing. A thyroidectomy to remove the gland is one of a number of ways thyrotoxicosis can be treated. Surgery is usually safe and effective but complications can happen. You need to know about them to help you to make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.