Patient information: Thyroid Surgery

Surgery on the thyroid gland - a thyroidectomy - involves the removal of all or part of the thyroid gland. This is now achieved with small incisions scars usually and just one night in hospital.

A thyroid lobectomy or hemithyroidectomy involves the removal of one half of the thyroid gland. The affected thyroid lobe and isthmus that connects it to the opposite lobe are removed along with the upward projection of the thyroid – the pyramidal lobe. This operation is associated with up to one night stay in hospital. Most patients will not require thyroid hormone (thyroxine) replacement following this procedure but patients are monitored after surgery in case it becomes necessary.

A thyroid isthmusectomy is sometimes performed when just the isthmus (central part of the thyroid) requires removal.

A total thyroidectomy is a procedure where all the thyroid gland is removed. This is the operation of choice in multinodular goitres, patients with Graves' disease and is mandatory in nearly all thyroid cancers. In the case of thyroidectomies for thyroid cancer lymph nodes surrounding the thyroid may also be removed.

Minimally invasive thyroidectomy is the term used to describe thyroidectomies performed endoscopically, with video assistance, via a small lateral incision or even with the assistance of a robot. Only small thyroid glands can be removed in this way. International literature and recent literature from the authors suggests that at most 15% of patients are suitable for this approach. Currently specialist thyroid surgery is associated with smaller incisions than before, muscle is rarely cut and drains almost never used.

What are the risks associated with thyroid surgery?

As with any operation, there is a risk associated with having a general anaesthetic.

Specific to these operations, there is a

- High risk of temporary neck stiffness and numbness of the skin on the front of the neck.
- 1% risk of bleeding in the wound usually within a day of surgery, which may require a second operation to resolve.
- 1% or less risk of permanent injury to a laryngeal nerve, which may lead to a permanent hoarseness or a change in the quality of your voice. More frequently there is a temporary change in the voice quality that usually resolves in the subsequent days and weeks.
- Small risk of excessive or unsightly scarring which mainly affects those with red hair or pale skin and black people.
- 1-2% risk of wound infection which rarely requires more than antibiotic treatment.

Overall thyroid surgery is safe when performed by experienced and appropriately trained specialist surgeons. Complications in thyroid surgery are infrequent and less likely to occur when surgery is undertaken by specialist thyroid surgeons in a team that regularly undertake thyroid surgery. There is a strong link between training and the experience of the surgeon and better outcomes in thyroid and parathyroid surgery. Large studies from Germany the USA have demonstrated that surgeons performing less than 30 thyroidectomies per year are more likely to have complications following thyroid surgery. Surgeons performing cumulatively more than 100 operations per year are most likely to achieve the benchmarks set by the world's leading centres.

Is there anything I need to do to prepare for my operation?

- If you take blood-thinning medications (such as **warfarin**, **clopidogrel** (plavix) or **aspirin**), we will ask you to stop taking them several days before your operation. If you are allergic to any medications, please let your doctor or the ward staff know before you have your operation.
- You will probably be admitted to hospital on the day before surgery. Please bring your nightwear, dressing gown, slippers and toiletries with you when you come into hospital. You should bring a list of any medicines you currently take (or the medicines themselves) with you as well.

Before coming into hospital

- You may be sent an appointment to come to the pre-admission clinic 1 or 2 weeks before your operation. This is to make sure that you are as fit as possible for the anaesthetic and the operation and usually involves some tests done, such as a blood test, chest x-ray, a heart tracing (ECG) and any other tests that may be required in your specific case. It is essential that you come to this appointment and it will also give you an opportunity to ask the doctor any questions you may have. It may help to write them down before you come.

What happens before the operation?

You will be admitted to hospital on the day of surgery or the night before surgery. Both the surgeon and the anaesthetist will visit you, explain what they plan to do and ask you to sign a consent form even if this was previously done in clinic. This provides you with an opportunity to ask any remaining questions you may have.

The nurses will perform some basic monitoring such as your temperature, blood pressure, respiration rate, height, weight and a urine test. A blood test may also be required.

What happens during the operation?

You will usually be asleep and the operation on your thyroid gland will be performed as discussed with you before the operation. Once the gland has been removed it will be sent for analysis.

How will I feel after the operation?

You will wake up in the recovery room before you are taken back to the ward where blood tests will be done later in the day.

To reduce the risk of neck swelling we ask that you sit upright after the operation and sleep with the head of the bed raised on the first night after the operation.

After an anaesthetic you may feel light-headed or sleepy. This usually resolves by the next morning. You may experience some discomfort at the operation site. We have tablets/ injections that can deal with these problems. Our aim is to keep you as comfortable and pain free as possible.
Normally dissolvable internal stitches are used which do not need to be removed. The skin is also covered in glue so that you can shower on the day of surgery if you wish. After the operation you will be allowed to start drinking and if this is Ok then you may also eat.

In the days after surgery, the blood calcium level can fall. This will be checked at least every day at first. You may require calcium and vitamin supplements which will be given as required by your doctor.

When can I go home?

Usually when no problems occur you will be able to go home after 1 day after the operation.
Once you go home you must continue to take the medication given to you whilst in hospital.

When can I get back to normal?

People are very different after operations. But overall you should be able to go back to **work** the following week**.** A common sense approach will be required so if you do any heavy lifting or carrying at work, you may need to take longer to recover. Heavy **exercise** should be avoided for 2 weeks after this procedure.

Will I need to visit the hospital again?

Yes. You will be given an out patient appointment to see your surgeon and perhaps your physician. Further blood tests may be required to monitor the calcium level and your need for thyroxine.