

Unilateral neck exploration and parathyroidectomy



Information for patients Endocrine Surgery

What are parathyroid glands and what do they do?

The parathyroid glands are four tiny glands located on either side of (or a little behind) the butterfly-shaped thyroid gland, in the neck. They maintain the blood calcium levels by releasing a hormone called parathyroid hormone (PTH). PTH helps to draw calcium into the blood from the bones, kidneys and intestines. Too much PTH and too little PTH can affect blood calcium levels and this in turn affects many other organs, especially the bones and the kidneys.

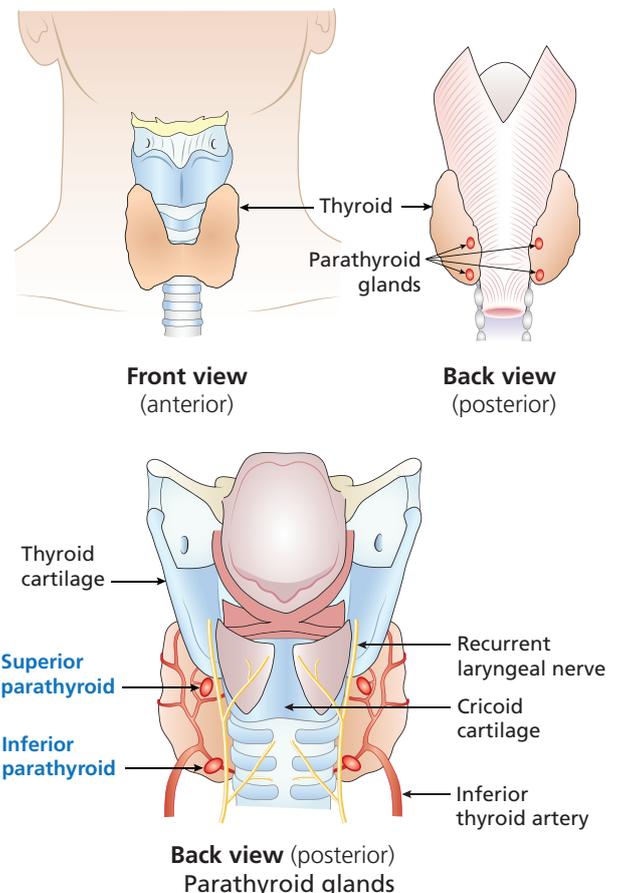
What is done in this procedure?

In this procedure, the surgeon aims to identify and remove one or more enlarged parathyroid glands through an incision (cut) across the front of the middle of the neck. Only one side of the thyroid gland is explored (dissected). This decision is usually based on scans you may have had that suggest that the abnormal parathyroid gland is very likely to be on one side.

Occasionally, the surgeon may decide to explore the other side if he/she thinks that may be of benefit to you. In that case, as many as three and half glands may be removed to treat the parathyroid condition effectively.

Occasionally the thymus gland that serves no useful function in adults, or rarely a part of the thyroid gland, may have to be removed. This is because an abnormal parathyroid gland may be embedded within these structures.

This procedure is done whilst you are asleep (general anaesthetic).



Why is this procedure performed?

This procedure is performed to correct parathyroid gland over-activity and hypercalcaemia (high calcium levels) in the condition called Primary Hyperparathyroidism (PHPT). This usually involves only one gland in around 85% of patients. Not all patients with this condition need surgery. Please discuss further with your surgeon if you are unsure as to whether surgery is right for you.

What risks should I be aware of in relation to this procedure?

The parathyroid glands are close to the voice nerves that supply the voice box (recurrent laryngeal nerve). These are usually carefully preserved, but can occasionally get bruised or damaged during surgery.

The operation is generally a safe and effective procedure. However, there is a potential for complications such as:

- **Voice and swallowing problems** - Injury to the laryngeal nerves (nerves that supply the voice box) is uncommon. But, if it occurs, your voice may become weaker, hoarse or husky. You may lose the ability to shout or sing and very occasionally swallowing becomes difficult. These effects are often temporary, but sometimes they may last a long time (less than 1% of patients).
- **Failure to cure the condition** – In up to 5% of patients, the condition is not cured at this operation. In this situation, some more blood tests and scans may be required and the possibility of a further operation may be discussed.
- **Low blood calcium levels** – This may occur especially in patients where more than one gland has been removed. This may result in low calcium levels after surgery. This problem and the symptoms it causes can be effectively treated with calcium and/or vitamin D supplements and settles in most patients, but can be long term in around 5-10% of patients.
- **Infection and bleeding** – These are risks associated with any surgical procedure. Although bruising around the incision (cut) may sometimes occur, the likelihood of a significant infection or bleeding complication is low. Occasionally, a second operation may be required to treat these complications.
- **Excessive scarring** – Although neck scars usually heal well and (like most scars) fade away with time, some patients develop 'hypertrophic scarring' and 'keloids' at the site of surgery. This is where the body forms excessive scar tissue in response to surgery and the scar becomes thick, prominent and sometimes itchy. If you are prone to developing these types of scars, discuss this with the surgeon.
- **Recurrent disease** – Uncommonly, the condition may occur in the parathyroid glands left behind. You are therefore generally advised to have your calcium checks done on an annual basis. This will help detect any recurrence of the condition early.

What should I expect before admission, on the day of surgery and after the procedure?

Before admission: You may be asked to have a laryngoscopy (examination of your larynx or voice box) to check the function of the voice box and ensure that there is no pre-existing abnormality. You will also be asked to have a pre-operative assessment to ensure that a general anaesthetic is feasible, safe and appropriate. Your surgeon will arrange for you to have some blood tests (including a check of your thyroid function and calcium levels).

On the day: You would usually be asked to come in on the day of the procedure. The anaesthetist and surgeon will see you before surgery. The anaesthetist will put you to sleep and the parathyroid glands will be removed. You may also have an injection in the neck to relieve pain and discomfort after the procedure.

After surgery: Recovery is usually similar to recovery following any general anaesthetic. You will be expected to stay in for at least one night after surgery. You will be prescribed painkillers, but the amount of pain and discomfort felt by patients following this operation is quite variable. If your pain is not well controlled, please don't hesitate to talk to the nurse. Some patients have nausea and vomiting after surgery; but these can be effectively treated as well.

You will usually be up, able to walk around and eat the next day. You will have blood tests at various time intervals to check your blood calcium levels. Your surgeon may also arrange for you to have your voice box re-examined at some stage after surgery.

You may need medical treatment for a while depending on the condition of your bones and your vitamin D levels. Your surgeon will discuss this with you.

Is there any other specific information I should be aware of?

The speed of recovery is variable. In general, patients are advised to rest for 2-3 weeks following the procedure. You are also advised to avoid driving for 2 weeks and avoid long haul air travel for 2 months following surgery.

After discharge, an appointment will be made to see the surgeon in a few weeks. In the meantime, if you experience any of the following symptoms, please ask to see a member of the clinical team sooner.

- Increasing pain, swelling, redness or discharge at the site of surgery
- Feeling excessively hot and/or cold
- Tingling, numbness, 'pins and needles' sensation in the tips of fingers or toes or around the lips and tongue
- Muscle spasms

Where can I get more information?

If you have any questions or concerns please don't hesitate to speak to the surgeon performing the operation for further information. The following websites may also be helpful:

- www.patient.co.uk/health/hyperparathyroidism-leaflet
- www.medicinenet.com/parathyroidectomy/article.htm



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