



York and Scarborough
Teaching Hospitals
NHS Foundation Trust

Parathyroidectomy

Patient Information Leaflet (1)
Endocrine & Surgical perspective

Ear, Nose and Throat (ENT) Department
York Hospital, Wigginton Road, York, YO31 8HE

❶ For more information, please contact:

The ENT Department
Telephone: 01904 726598
or

The Renal Department
Telephone: 01904 725370

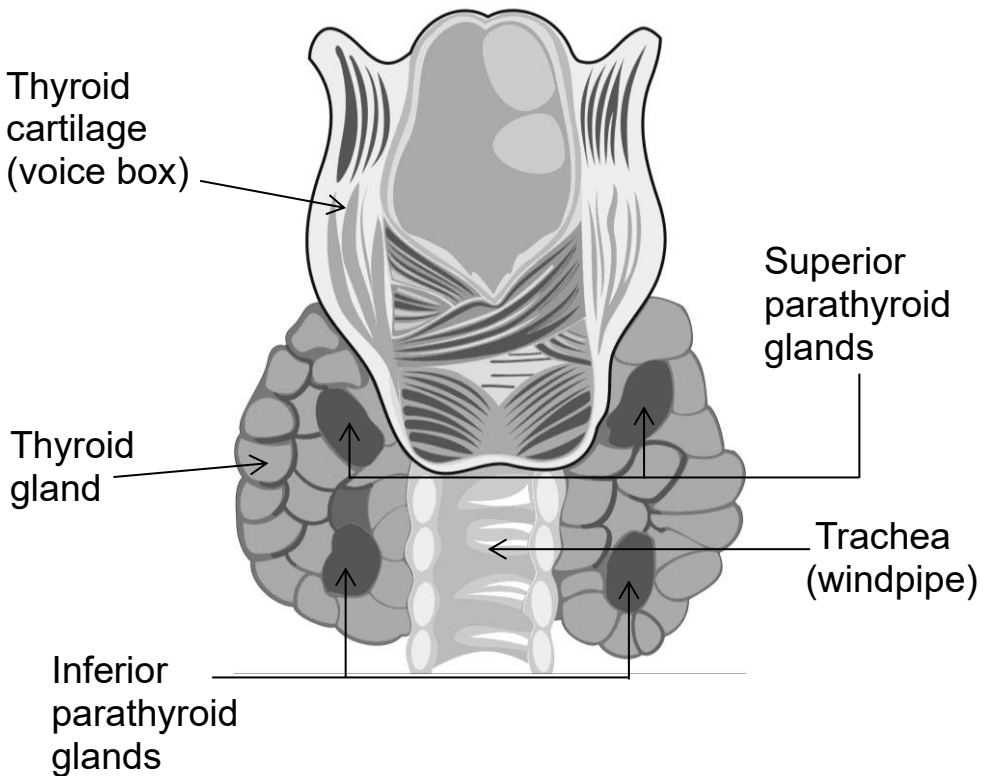
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Aim

This information document will explain to you why you are being seen and considered for parathyroid surgery.

What are the parathyroid glands?

The parathyroid glands are four small glands that sit behind your thyroid gland in your neck.



What do the parathyroid glands do?

The four glands are responsible for helping your body maintain the calcium levels in your blood which is important for several bodily functions including maintaining a healthy heart and bones.

What can go wrong with the parathyroid glands?

Sometimes one or more of the parathyroid glands become overactive causing high levels of calcium in your blood which can lead to a number of problems.

Initially you might not have any symptoms, but if you do they might include:

- Bone and joint pain.
- Feeling tired and sleepy.
- Abdominal pain and constipation.
- Mood changes.
- Thirst and passing excess urine.

If high calcium levels persist you are at a risk of developing kidney failure or bone fractures.

How is abnormal parathyroid function diagnosed?

A blood test will show high calcium and parathyroid hormone levels. This blood test might be done more than once to confirm high levels.

If the diagnosis is made based on the results and your endocrinologist has referred you for surgery, we will arrange for you to have either one or two of the following scans to try to identify an abnormal or enlarged parathyroid gland:

- An ultrasound scan of the neck
- A 4D CT Multiphase Parathyroid scan
- A Sestamibi Scan (a nuclear medicine scan)

Occasionally we are unable to confirm the location of the abnormal gland(s) from the scans.

If you already suffer from kidney failure your renal consultant will refer you for surgery. In most cases we do not do the scans as we will have to try to remove all four glands to control the high calcium levels.

What is a parathyroidectomy?

A parathyroidectomy is an operation to remove the diseased gland(s). Patients on dialysis will have all four glands removed if possible. In 95% of cases the operation is successful at the first attempt.

The operation involves a small “necklace” cut called an incision into your lower neck. If you already have a crease in your neck the incision will be made here so any scarring is less noticeable. If the scans are able to localise the abnormal gland then the incision will be small (about two to three centimetres).

In about one in three patients the scans cannot locate the abnormal gland. We will make a slightly bigger cut (but still small) in the midline of the neck to enable us to identify all four glands and remove the abnormal ones.

Before the operation you will be referred to see a surgeon, who will check your voice box and discuss the operation. You will be put on the waiting list for a pre-operative assessment and an operation date. If you decide not to have the operation, your symptoms might get worse and there is a small risk you might develop life threatening complications.

As this operation involves general anaesthesia, we will provide you with another leaflet called ‘What you need to know when coming into hospital for surgery’ that gives more information on anaesthetics and their side effects.

What is involved in the operation?

The operation is carried out under general anaesthesia. A neck incision is made, and the abnormal gland(s) are identified and removed. The wound is closed with dissolvable stitches or clips. The procedure takes about one hour. After the operation you will be looked after in the recovery area then transferred back to your hospital ward.

Is it painful?

After the operation you might be in some discomfort for a few days and may have a sore throat. You will be given some painkillers if required. Provided the doctors are happy with your blood results and you are well, you should be able to go home the same day or the day after your operation. You may require a blood test before you go home to check your calcium and your parathyroid hormone levels. You will need to rest for a week before going back to work.

Wound care

You will need to keep the wound dry for 48 hours. If the wound is closed with clips you will need to have these removed with your GP in 5 days. You will need a blood test to check the calcium level has reduced and you will see your surgeon again in about four weeks. After this you will continue to be looked after by the endocrinologist or renal doctor who referred you for the parathyroidectomy.

Does the surgery have any risks?

There are some small risks:

Bleeding: This is a rare complication; only in extreme circumstances would a patient need to go back to theatre to stop the bleeding.

Voice change: This can occur from neck operations but usually settles after a few months.

Injury to the recurrent laryngeal nerve: This nerve passes close to the thyroid and parathyroid glands. It is responsible for the movement of the vocal cords. If the nerve sustains an injury it could result in hoarse or weaker voice. The risk is less than 1%.

Low calcium level: After the removal of the overactive gland, the other glands might need a few days before they return to normal activity; this might cause your calcium level to fall too low. If the bones rapidly absorb more calcium from the blood (Hungry Bone Syndrome) this can cause significant symptoms. To prevent this you might be given calcium tablets to take after your operation.

Neck scar: Usually the scar is small and faint. Sometimes it looks swollen and red over a couple of months, but it will fade.

Infection: There is a small risk of infection with any operation, this is normally treated with antibiotics.

Failure to find the abnormal parathyroid gland: In a few patients, despite the pre-operative scans to indicate the location of the abnormal gland, it might still be difficult for the surgeon to find the offending parathyroid gland. Rarely, more than one gland can be problematic.

What are the alternatives to surgery?

If surgery is not recommended you will be offered preventative measures with regular monitoring.

Preventative measures may include the following:

- Avoiding medicines that can cause high calcium levels.
- Encouraging adequate fluid intake to avoid dehydration.
- Encourage physical activity to increase bone strength.
- Maintaining a balanced diet - you may be referred to a dietician.
- Be prescribed vitamin D supplements.
- If you are having symptoms of bone disease and muscle pain and your doctor does not think you are suitable to have surgery, you may be offered a new type of medicine called a calcimimetic. These medicines require careful monitoring, and you will need regular blood tests.

Do you have any further questions?

For more information please contact the following:

Head and Neck unit, ENT department York:	01904 726598
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Endocrine Team: 01904 721175	01904 725624
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Endocrine Clinic:	01904 726510
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Renal Sec: Wendy Dodd	01904 725374
Elizabeth Bellerby	01904 725813

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:
Frank Agada, Consultant ENT Surgeon, The York Hospital, Wigginton Road, York, YO31 8HE or telephone 01904 726598.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email yhs-tr.patientexperienceteam@nhs.net.

An answer phone is available out of hours.

Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website:

www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/

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