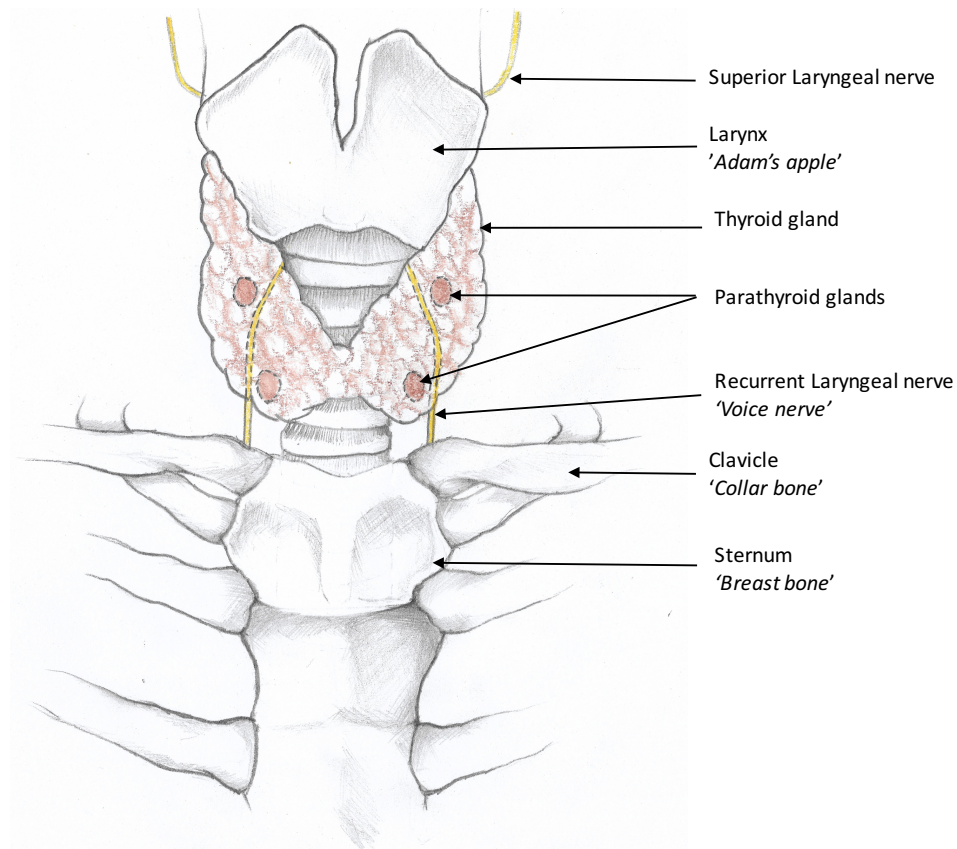


## Patient Information Leaflet P1

### Parathyroid Operations in Adults

#### **What are the Parathyroid glands and what do they do?**

Usually, you have four parathyroid glands. These are located between the thyroid gland and the windpipe, two on each side. In healthy adults, each parathyroid gland is usually 3-4 mm in size. They are responsible for the secretion of a hormone (the parathyroid hormone, PTH) which is required for the regulation of calcium in the body.



#### **Reasons why patients may need parathyroid surgery**

One common cause of high calcium in the body is due to an abnormal parathyroid gland which is 'over-functioning' and producing too much PTH.

In the majority of patients, this is due to a single abnormal parathyroid gland (*Primary Hyperparathyroidism*). In some instances, more than one gland is involved.

PTH acts on the kidneys, bone and gastrointestinal tract (stomach and bowel) to increase the calcium in the blood. Although high calcium may be associated with symptoms, many patients have their high calcium detected coincidentally on routine blood tests.

Symptoms that may be associated with high calcium can include:

- muscle weakness and fatigue
- changes in your heart rate
- weight loss
- excessive thirst
- changes in urinary frequency
- dehydration
- stomach ulcers
- kidney stones
- fractures

Even in patients who do not have symptoms due to high calcium, parathyroid surgery is recommended, as surgery decreases the long-term effects on the bones and kidneys.

### **What are the alternatives to surgery?**

Medication does exist to control the high calcium in the blood. You may already have discussed these options with your endocrinologist prior to referral to the surgical clinic. Medical treatment is generally of temporary benefit, and does not address the underlying problem of the overactive parathyroid gland.

### **What tests would I expect to have before surgery?**

Prior to referral to the surgical clinic, blood and urine tests are likely to have been performed by your endocrinologist. In addition to this, all patients would need to have an *ultrasound* scan of the neck and kidneys. A specialized scan called the *Sestamibi* scan would also be required in the majority of circumstances. For the minority of patients, a CT scan or an MRI scan may be required.

### **What type of parathyroid operations should I expect?**

The operation is performed under a general anaesthetic so you are completely 'asleep'.

There are generally 2 approaches to parathyroid surgery

#### *Open Operation*

Also called cervical exploration or bilateral neck exploration.

The surgeon will make a small incision (5 to 7cm or 2 to 3 inches) in your neck in order to perform the surgery. The advantage of this type of surgery would be to ensure that all four parathyroid glands are inspected, and the diseased gland is removed.

#### *Focused Operation*

Also known as minimally invasive approach or keyhole approach.

The use of the preoperative scans has allowed more accurate identification of the diseased parathyroid gland in some patients. Thus, in these patients a smaller scar can be used. Only the gland identified to be diseased on the scan(s) is removed.

Your surgeon will explain which one you are advised to consider and why.

In both cases, the wound is then stitched with dissolving stitches or removable stitches. It will heal to form a scar.

### **What will happen prior to surgery?**

If you are on regular medications, you should continue these unless advised otherwise. Some surgeons may ask you to stop taking medicines such as aspirin, dipyridamole (Persantine) or clopidogrel (Plavix) in the days leading up to your operation. If you are on any of these tablets, discuss this with your surgeon. Patients on blood-thinning tablets (such as warfarin, rivaroxaban or dabigatran) should inform their surgeon.

### **How long will I be in hospital?**

This depends very much on what procedure you had and the hospital's local policies. Your surgeon will advise you accordingly.

### **Care of your wound**

When you are discharged from hospital you can expect to be given advice about care of your wound from the ward staff. The wound may be covered by a dressing and this can usually be removed after 48 hours unless you are told

otherwise. You will usually be able to take a bath or shower 48 hours after your operation. Gently pat your wound dry rather than rub it.

Your wound may be slightly raised and pink or red in the days following surgery. This will settle over time as it heals. Eventually the wound should become flat and pale but this may take several months.

Unless suggested by your medical team, it is not advisable to rub any ointments or bio-oils onto the wound immediately after your surgery before the wound has had chance to heal. It is best to wait until you have been seen in the post-operative clinic and discuss with your surgeon if you wish to use such products.

**What can I expect after the operation, and how soon will I recover?**

It is normal to feel tired following parathyroid surgery. The symptoms of tiredness that you may have had pre-operatively may take a few weeks to resolve.

In some cases, following parathyroid surgery, the levels of calcium in your blood can fall *too* low. This is while the body regains control of calcium balance in your blood stream. Your surgical team will check for this on postoperative blood tests and you may be prescribed calcium tablets should these levels fall too low. If you feel tingling or spasms in your lips, fingers or toes, contact your GP as this can be a sign that your blood calcium *may* have fallen too low.

Following a neck exploration, you should be able to eat and drink normally, but some patients feel as though there is a lump in their throat as they swallow. This is common and will disappear in time.

Before resuming driving you need to ensure that you can make an emergency stop without hurting your neck. You also need to be able to comfortably turn your neck to look around as you drive, for example, when you change lanes. You should inform your car insurance company that you have had a parathyroid operation as different insurers may have their own rules about how long you should wait after an operation before you return to driving.

Your return to work depends on the type of work you do and the operation you have had. You may be able to return to office-based work after two to three weeks and heavier work after four weeks. Your surgical team will advise you.

**What are the possible complications of parathyroid surgery?**

Complications of parathyroid surgery are uncommon. The vast majority of patients have straightforward surgery and are discharged the following day without any complications. Your surgeon will discuss the benefits and potential complications of surgery with you in detail. Please feel free to ask any questions that are on your mind.

BAETS have produced a patient information leaflet, **Potential Consequences of Parathyroid Surgery**, which can be found on our website ([www.baets.org.uk](http://www.baets.org.uk)).

BAETS wishes to acknowledge the advice and support of Hypopara UK, a patient support group that supports patients who have post operative parathyroid problems.

For further information and support please visit Hypopara UK at [www.hypopara.org.uk](http://www.hypopara.org.uk) or call 01342 316315/01623 750330

Disclaimer

The advice in this leaflet is believed to be true and accurate at the time of going to press.

Ultimately, the responsibility for obtaining informed consent from you for a surgical procedure lies with your surgical team and not with the British Association of Endocrine & Thyroid Surgeons (BAETS).

BAETS cannot accept any legal responsibility for the contents of this leaflet which is produced in good faith.