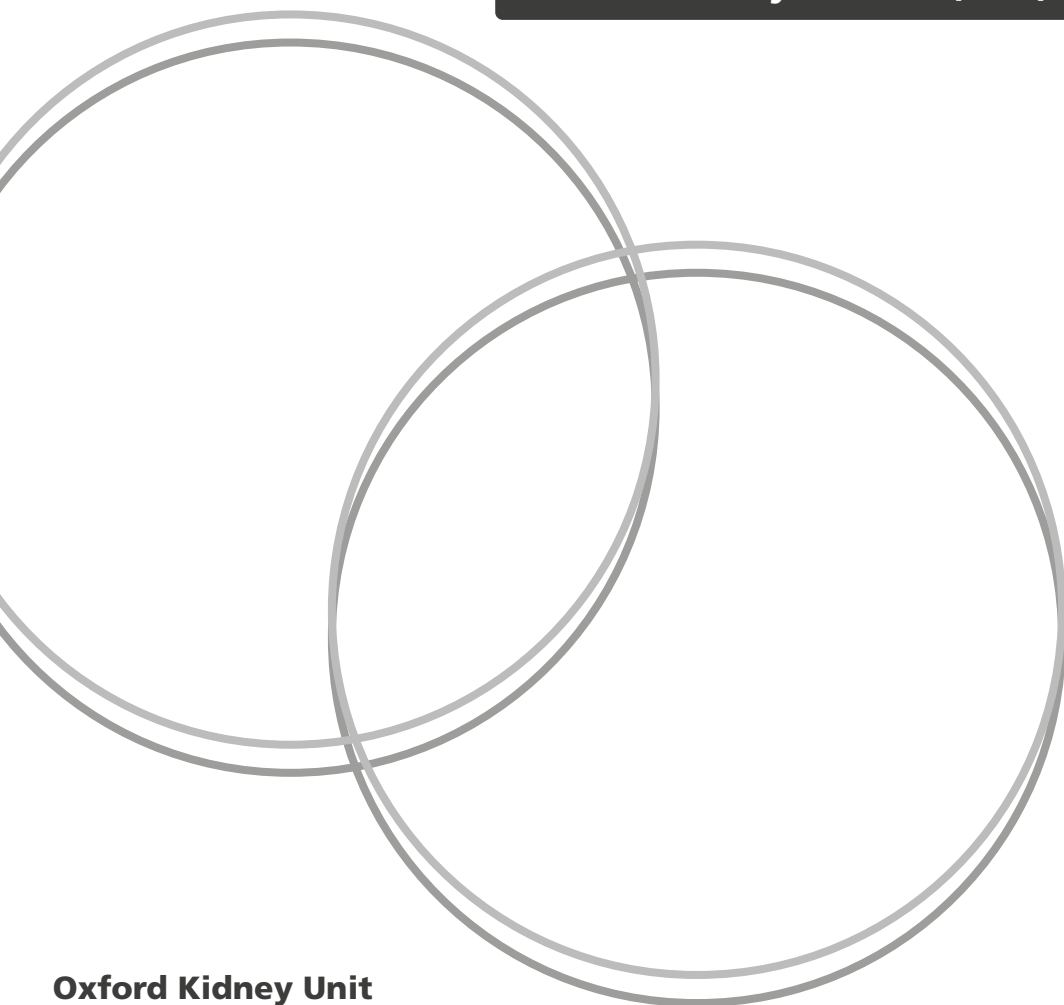


Parathyroidectomy: An operation to remove overactive parathyroid glands

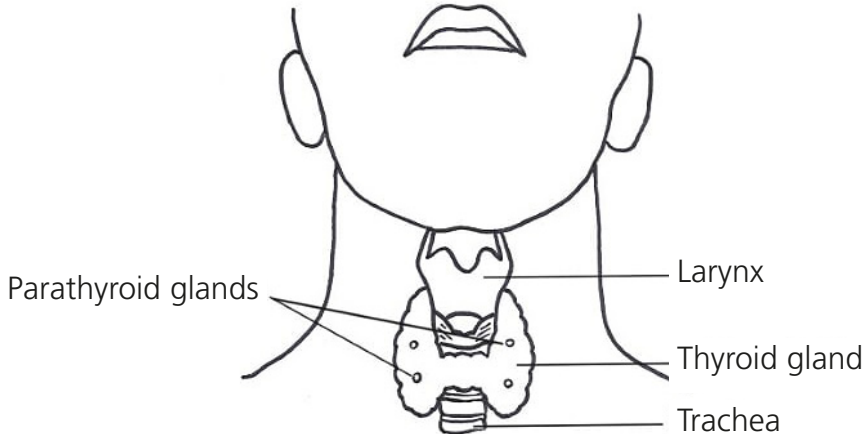
**Information for people with
Chronic Kidney Disease (CKD)**



You have been given this leaflet because you have been told you need a parathyroidectomy. A parathyroidectomy is an operation to remove some or all of the parathyroid glands. This leaflet tells you what happens before and after the operation. If you have any questions after reading this leaflet please speak to your kidney or surgical team.

What are the parathyroid glands?

There are four parathyroid glands in your neck, each the size of a grain of rice. They are situated behind the thyroid gland.



The parathyroid glands respond to unbalanced calcium and phosphate levels in your blood by producing a hormone called parathyroid hormone (PTH). This is responsible for controlling calcium and phosphate levels in your blood. Medication and diet can also be used to treat calcium and phosphate balance.

PTH levels are measured by taking a blood sample.

Sometimes the parathyroid glands continuously release high levels of PTH (hyperparathyroidism), which medications and diet can no longer treat. The best option for this is a parathyroidectomy.

Symptoms of hyperparathyroidism

Hyperparathyroidism can cause the following symptoms (though not everyone gets them):

- aching bones and joints, especially in the legs and back
- muscle tenderness or weakness, making it difficult to move from sitting to standing
- increased risk of bone fracture or tendonitis
- worsening anaemia because EPO (an injection used to treat anaemia) becomes less effective.

What happens now I have been referred for a parathyroidectomy?

You will have an appointment to see a surgeon, who will look at your medical history and discuss the operation with you. You will also need three scans, which are done on the same day:

- an ultrasound scan; this uses harmless sound waves and is used to examine your parathyroid organs and tissues in your neck
- a sestamibi scan; this involves injecting a small amount of radioactive substance into a vein in your arm and taking X-ray pictures two and four hours later
- an MRI scan.

The scan results may help locate the enlarged parathyroid glands and show how many of them need to be removed. The surgeon may not remove all of the parathyroid glands during the operation, as this helps keep your bones healthy.

Before you have your parathyroidectomy you will need to have a **pre-operative assessment**. This is to make sure you are fit for the operation. During this assessment, you will have an ECG to check your heart, undergo a physical examination, have blood tests, and receive details about your operation. Please feel free to ask any questions you may have.

You will be asked about all medicines that you are taking, either prescribed, or bought over-the-counter and online.

If you are on haemodialysis, during the week of your operation you may need to change your dialysis days. After the operation your dialysis days will be the same as before.

What medications will I need before the operation?

- You may need to start (or increase) the dose of a medication called Alfacalcidol or Calcitriol (vitamin D supplement) five days prior to your operation.
- You may need to stop your cinacalcet dose (if you are taking it) four days before your operation. This will be dependent on your calcium level; we will let you know this at your pre-operative assessment.
- Cinacalcet must not be taken on the day of your operation as it may cause your PTH level to drop too low after the surgery.
- If you are receiving Etelcalcetide on haemodialysis, we may need to stop it 2 weeks before surgery if your calcium is in normal range.

What are the risks or side effects of a parathyroidectomy?

As with all operations, there are some risks. Those that are specific to this operation include:

- Damage to one of the nerves that supply the voice box, which can result in hoarseness. This is usually temporary. Permanent nerve damage occurs in less than 1 in 100 people. You may also find it difficult to project your voice, such as shouting, but this is quite rare.
- It is quite common for your calcium level to drop below the normal range after the operation and sometimes after several days. This may cause tingling in your hands, fingers, lips and around your nose. We will give you medication(s) to improve this.
- Bleeding under the wound. Serious bleeding that requires another operation is rare.
- A small amount of bruising in the first few days.
- An infection, but this is rare. You will be given antibiotics if needed.
- Scarring – your wound may initially be thick and red after the procedure, before fading to a thin white line over time.

- Failure to cure the hyperparathyroidism. There is also a small risk that an abnormal parathyroid gland that is not in your neck area continues to produce high levels of PTH. You may need a second operation to remove this gland.
- If all of the parathyroid glands are removed, you will need to take calcium and vitamin D supplements for the rest of your life (this affects between 1 and 5 out of every 100 people).

The surgeon will talk through these risks and side effects with you in more detail.

What happens during the operation?

The operation takes about 1 to 2 hours.

Before the operation you will see a nurse, a surgeon and an anaesthetist. The surgeon will discuss the operation with you again and you will be asked to sign a consent form. If you have any questions, please ask before signing the consent form.

Your blood pressure will be checked. When it is time for the operation, a nurse will take you to the operating theatre.

You will be asleep under a general anaesthetic whilst the operation is carried out. A small cut, 6cm to 8cm long, will be made along a crease line at the base of the front of your neck. The length of the cut will depend on how many glands need to be removed.

A narrow plastic tube, called a central line, will be inserted into a large blood vessel in your neck. This is used to give you calcium directly into your blood after the operation. It is usually removed when your calcium level is stable.

When the enlarged glands have been removed, the cut will be sealed with dissolvable stitches under your skin and paper stitches over the cut.

You will be given a pain block during the operation. This is an injection of local anaesthetic into the nerves that go to your neck and throat. This will last up to 24 hours and will help reduce discomfort after the operation. It may also make your ear lobe numb.

What happens after the operation?

After the operation you will go to the recovery unit. You will be positioned upright, supported by several pillows, to help reduce any swelling in your neck.

If you feel discomfort in your neck after your procedure, we will give you pain relief.

Your voice may be hoarse, or may have a slight change in the tone or pitch. This generally settles within a few months after the operation.

You may need to stay in hospital for up to a week, for post-op wound care and the management of low calcium level. When you are eating and drinking, you will need to start taking calcium supplements / medication. Your calcium level needs to be stable before you can go home.

What happens when I go home?

Please make sure you have all your medication to take at home and you understand why you need to take it. This includes what to do if you develop symptoms of low calcium.

Symptoms of a low calcium level:

- pins and needles or tingling around your mouth, lips, fingers and toes
- muscle cramps
- spasms in your hand.

You will need to have your calcium checked twice a week for the first two weeks after the operation. If you are on haemodialysis we will check your calcium level each time you come to dialysis.

Driving

Do not drive for at least 48 hours after the operation. After this time, make sure your neck feels comfortable enough to move freely, enabling you to drive safely. Most people don't drive for two weeks after the operation, but you would need to check this with your insurance company.

Showering and bathing

Keep your wound dry until the paper stitches fall off; this usually takes about two weeks. If your wound becomes painful and red see your GP or renal team immediately.

Returning to work

Most people take two weeks off work. If your job is manual we may advise you to take more time off.

Contacts

Renal Bone and Mineral Metabolism Specialist Nurse

Telephone: 01865 225 813

Renal Ward, Churchill Hospital

Telephone: 01865 225 780

(24 hours, including weekends and Bank holidays)

Websites

Kidney Patient Guide

Information for people with kidney failure and those who care for them.

Website: www.kidneypatientguide.org.uk

Kidney Care UK

A charity which has lots of practical support and information for people with kidney disease.

Website: www.kidneycareuk.org

Oxford Kidney Unit

Lots of information about the Oxford Kidney Unit for patients and carers.

Website: www.ouh.nhs.uk/oku

NHS Website

Information about hyperparathyroidism.

Website: www.nhs.uk/conditions/hyperparathyroidism

Six Counties Kidney Patients Association

The SCKPA is run for patients by patients or family members.

They offer support to people suffering from kidney disease or who are on dialysis. They work closely with the Oxford Kidney Unit and have branches in Oxfordshire, Northamptonshire, Buckinghamshire, and Milton Keynes, and parts of Wiltshire, Gloucestershire and Berkshire.

Website: www.sixcountieskpa.org.uk

Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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