Parathyroidectomy

Surgery to remove one or more parathyroid glands.

What is parathyroidectomy

Parathyroidectomy is an operation to remove one or more of the four parathyroid glands in your neck. It is the main treatment for primary hyperparathyroidism and for some cases of secondary or tertiary hyperparathyroidism.

Why might I need this surgery

- High blood calcium (hypercalcaemia) causing symptoms or complications.
- Kidney stones or kidney damage.
- Bone thinning (osteoporosis) or fractures.
- Unexplained tiredness, mood changes, abdominal pain, or frequent urination linked to high calcium.
- Secondary hyperparathyroidism that does not respond to medicines, especially in kidney disease.

Types of parathyroid surgery

- Minimally invasive (focused) parathyroidectomy – removal of a single overactive gland through a small neck incision.
- Bilateral neck exploration – the surgeon checks all four glands and removes any that are overactive.
- Other approaches may be available in specialist centres; your surgeon will explain whether they are appropriate.

Preparing for your operation

- Pre-op blood tests (calcium, PTH, vitamin D, kidney function) and ECG if needed.
- Scans may help locate an overactive gland before surgery. Your team will decide which scans are appropriate; a scan that does not locate a gland does not exclude the condition.
- Discuss all medicines and supplements at preassessment. Do not stop blood thinners or other prescribed medicines unless your team gives you specific instructions.
- Follow your hospital’s written fasting instructions, including which fluids and medicines are allowed. Contact the team if the instructions are unclear.
- Arrange transport home and help for a few days after the operation.

On the day of surgery

You will have a general anaesthetic (you will be asleep). A small incision is usually made at the lower front of the neck. The surgeon identifies and removes the overactive gland(s). Sometimes a small drain is placed; it is usually removed before you go home.

Risks and possible complications

- Bleeding or haematoma in the neck (rare).
- Infection of the wound.
- Voice changes can be temporary or permanent if a nerve supplying the voice box is affected. Your surgeon should explain the risks for your operation; risks differ for first-time and repeat surgery.
- Low calcium can cause tingling or cramps. It is often temporary, but some people need prolonged treatment, particularly after surgery involving several glands.

- Scar – typically small and fades over time.

After the operation

- Most patients go home the same day or after one night in hospital.
- You may have a sore throat and mild neck discomfort; simple painkillers help.
- Your team will check calcium before discharge and arrange further blood tests according to your risk and results.
- You may need calcium and vitamin D treatment. Take the prescribed dose and follow the monitoring plan; do not change it on your own.
- Follow the instructions for your dressing, wound care, showering and any stitches; these vary with the closure used.

Recovery at home

- Most people return to normal activities within 1–2 weeks.
- Avoid heavy lifting or strenuous exercise for about 2 weeks.
- Gentle neck stretches can help stiffness (ask your nurse for advice).
- Protect the scar from sunlight for the first year to help it fade.

Follow-up

- An early follow-up visit or blood test will be arranged. For primary disease, calcium is usually checked at 3 to 6 months to assess whether the operation has been successful.
- Long-term blood tests (usually yearly) to monitor calcium.
- Bone density scans may be repeated to check bone health.

When to seek urgent medical help

Call 999 for rapidly increasing neck swelling, breathing difficulty, collapse or substantial bleeding after surgery. Neck bleeding can compress the airway.

Contact your surgical team urgently the same day for new tingling around the lips or in the fingers, or muscle cramps. Do not wait for symptoms to become severe or fail to respond to tablets.

Seek urgent advice for fever, increasing wound redness, discharge or worsening swallowing. Severe spasms, seizures or breathing difficulty need emergency care.

Persistent or recurrent disease

Calcium may remain high or rise again later. Further investigation or treatment may be needed, and long-term blood tests remain important.

About this information

This leaflet explains the condition and common treatment choices. Your care team will advise what is suitable for you. If you have an operation, follow the specific preparation and aftercare instructions provided by your hospital.

Further information

NICE NG132 recommendations

UCLH parathyroid surgery