



Parotidectomy - Surgery to remove a lump

QUICK FACTS

- The skin on your cheek and earlobe may be numb after surgery.
- After surgery, the skin of your cheek may 'sweat' while eating.
- The nerve that controls your face muscles may be weak for a while after surgery. Sometimes the weakness is permanent.
- You might experience a sharp pain when you take your first bite.

ABOUT THE CONDITION

What is the parotid gland?

The parotid gland is the biggest of the three main glands in your face that produce saliva (spit). You have one on each side. They are in your cheeks, just in front of the ears (see figure 1a).

Small tubes in the parotid glands move saliva into the mouth. There are also hundreds of small glands in your mouth that produce saliva. Saliva helps keep your teeth clean and starts breaking down food as you chew it.

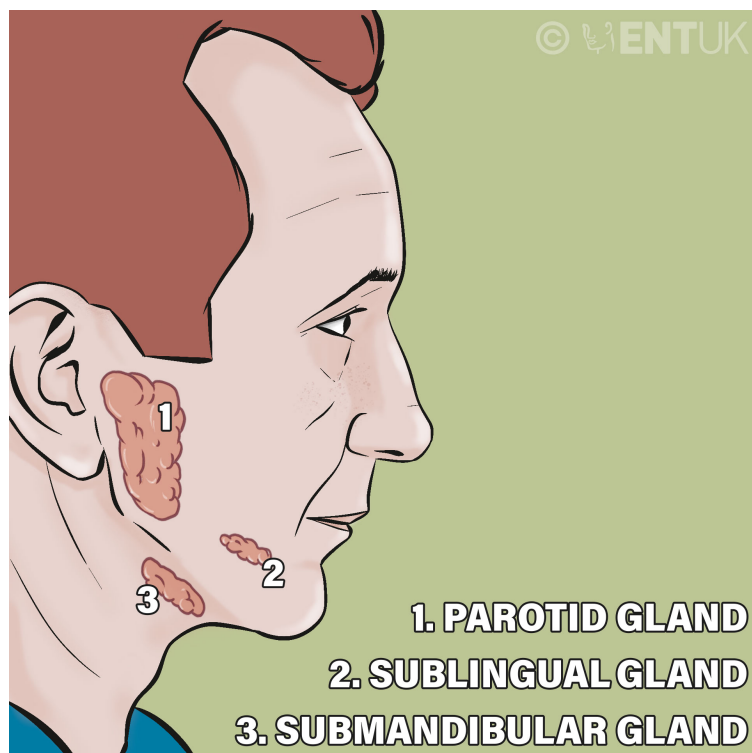


Figure 1(a). Position of the main saliva-producing glands

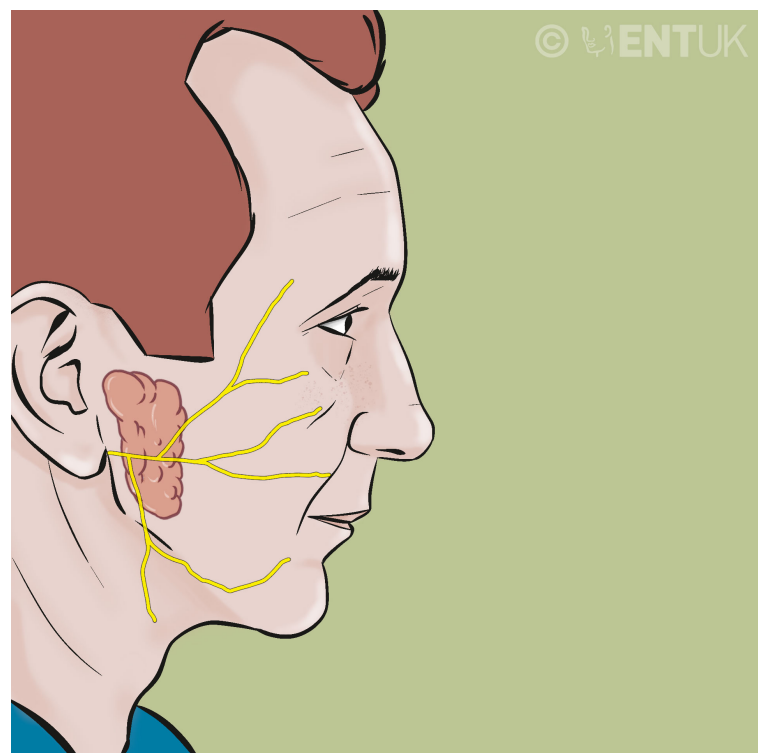


Figure 1 (b) Position of the facial nerve and its branches (shown in yellow).

A very important nerve runs through the parotid gland. This is called the facial nerve. The facial nerve moves the muscles in your face. It controls your smile and eyelid muscles.

Some people may develop a lump within the parotid gland. The medical term for this is a tumour. Lumps in the parotid gland can be benign (not cancer) or malignant (cancer). Sometimes the lump is caused by an enlarged lymph node within the gland. (Lymph nodes are small, kidney-shaped organs spread throughout the body. They play an important role in the immune system.)

Will I need any tests?

If your doctor thinks you have a lump in the parotid gland, they may want you to have an ultrasound scan. This will give them more information. The person carrying out the scan may take a few cells from the gland with a small needle. This is called fine needle aspiration (FNA). Sometimes, a sample of tissue is taken with a larger needle. This is called a core biopsy and is rare.

Other scans such as a CT or MRI scan may be needed to get more information about the lump. The scans will be arranged if your specialist thinks this is needed.

How are parotid lumps treated?

Treatment depends on what is causing the lump. **Eight out of ten lumps in the parotid gland are benign.** In many cases, it is best to take them out as some benign lumps may become **malignant (cancerous)** in time. If the lump is already cancerous or looks like it might become cancerous, it should be taken out as part of the treatment.

Sometimes it can be difficult to say if a lump is benign or cancerous, even after scanning the gland and taking tissue samples. When this happens, the lump and part of the parotid gland might have to be removed and looked at under a microscope to find an answer.

ABOUT THE PROCEDURE

What is the benefit of having surgery?

Your surgeon has recommended surgery because you have a lump in your gland. The scans and biopsies have provided some information, but the best way to know what is causing the lump is to look at the whole lump under the microscope. You will then know for sure what is causing the lump.

What will happen if I do not have the operation?

The lump will continue to grow. Some grow slowly, some quickly. Some may look unsightly and may affect the nerve that moves your facial muscles.

It is important to understand that **some benign tumours can turn into a cancer** over time. Nearly one in ten of the commonest benign parotid lumps can turn into a cancer after 15 years. Your surgeon will tell you how likely this is in your case.

The needle test is a small sample of the lump. It can help indicate whether the tumour is benign or malignant. The only way to know for sure is to remove the lump and the surrounding gland.

What are the alternatives to surgery?

Some patients, such as the elderly or people with multiple health conditions, may be unfit for surgery. They may choose to have their doctor keep an eye on the lump instead. Their doctor will examine the lump regularly and use scans if needed.

What does surgery involve?

The surgery is performed under general anaesthetic. This means you will be asleep throughout the operation. A cut will be made from the front of your ear down onto your neck. This cut tends to heal very well, and in time the scar is hardly visible.

In a **partial parotidectomy** (also called a **superficial parotidectomy**), the part of the parotid gland that sits between the skin and the facial nerve is removed. In a **total parotidectomy**, the whole gland is removed.

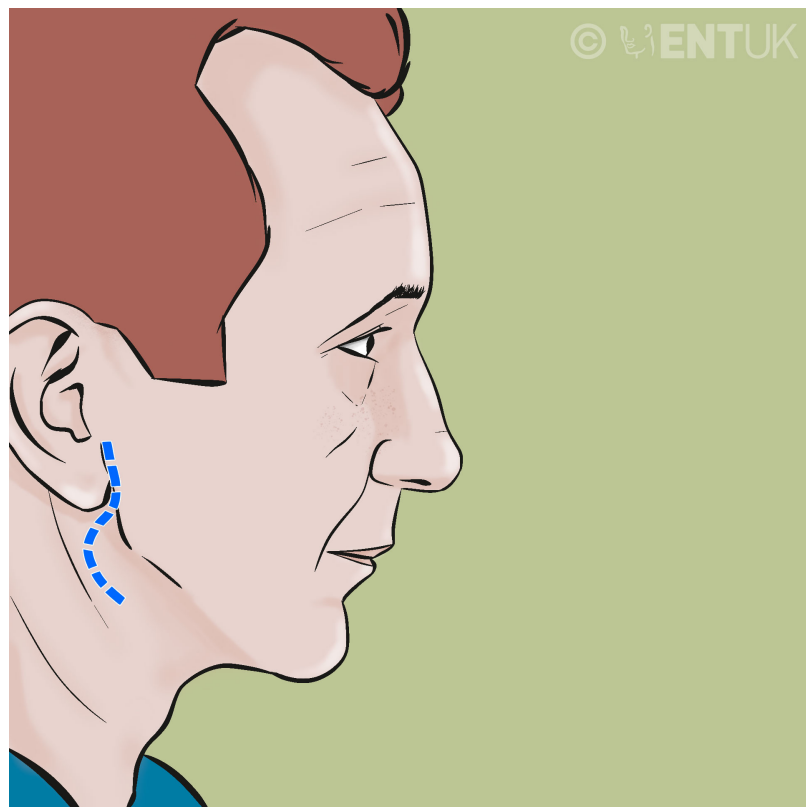


Figure 2. Location of the scar

At the end of the operation, the surgeon may insert a plastic tube called a drain through the skin. The drain lets blood and fluid to drain out of the neck so that it doesn't collect. The drain is often left in overnight. Once the surgeon decides that the drain can be taken out, most patients can go home. Sometimes a drain is not needed.

What can I expect after the operation?

After the operation, you will be taken to the recovery area. When you are fully awake, you will be taken to a ward or day surgery unit.

Will my face look different?

You will have a scar. We try to hide this in the natural curves of your face. Scars may look thickened, but it is uncommon to develop a **keloid scar**. Keloid scars are more common in people from Afro-Caribbean descent or the Indian subcontinent. If you have thickened, unsightly scars elsewhere on your body, please let your surgeon know in advance. They can discuss options with you in more detail.

It is very common for your face to look less full when the gland has been removed. The gland is very close to the skin, and there is not much fat in this area. If the lump is very large or the full gland is removed, the contour of the face will likely be affected. Between seven and 40 out of 100 cases involve moderate to severe loss of facial contour.

Numbness of the face and ear

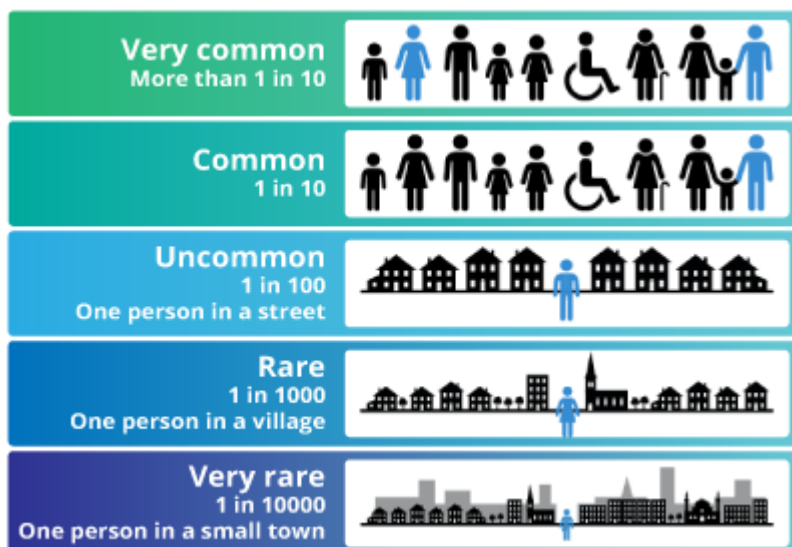
After the operation, you may find that the skin on your earlobe and the side of your face feels numb. This is very common, affecting up to 80 out of 100 patients. It usually improves with time but can be permanent. Numbness can become permanent for up to five cases in 100 in partial parotidectomy, or around ten in 100 for total parotidectomy). If you shave, you should take extra care not to cut yourself. Clip-on earrings may cause pressure damage to the ear lobe.

ABOUT THE RISKS

Are there any complications to this operation?

Most patients who have this operation recover well.

The complications and risks of any surgery are grouped into the following categories.



Official complication rates for this operation can vary widely. Your surgeon will be able to tell you their own complication rate.

- **A blood clot (haematoma)** can form under the skin. This occurs in between seven and 12 cases out of 100. Sometimes another operation is needed to remove the blood clot and replace the drain.
- **Wound infection.** Sometimes the wound can get infected. This can cause pain, swelling and redness of the wound and skin. However, **wound infection** is uncommon. It affects between one and two out

of 100 patients). Antibiotics can usually stop the infection. In rare cases, pus can develop in the wound. The wound may then need to be opened to drain the pus and be washed. This usually happens under a general anaesthetic.

- **Sweating around the cheek when eating (Frey's syndrome).** Some patients find that after surgery their cheek becomes red and sweaty when they eat. This can start months after surgery and is very common. It can affect up to 67 out of 100 patients having a partial parotidectomy and up to 94 out of 100 patients having a total parotidectomy. It happens when the nerve supply to the gland connects with the sweat glands in the skin. Even the thought, smell and sight of food can make your gland produce saliva (spit), and this makes your face sweat. Although Frey's syndrome is very common, it doesn't usually affect people severely or pose many difficulties. It is usually easily treated. A roll-on antiperspirant will help. Sometimes Botox is recommended. Botox temporarily stops saliva being produced.
- **Leaked saliva** from the cut in the parotid salivary gland can collect under the skin. This happens in up to 16 out of 100 partial parotidectomies, and up to 26 out of 100 cases when the whole gland is removed. The saliva can be drained with a small needle. It may need to be drained several times. Saliva can leak through a small hole in the wound called a fistula. This is uncommon. A salivary fistula can form in up to two out of 100 cases of partial parotidectomy. It is more common in total parotidectomies. It can form in 11 out of 100 cases. This usually stops by itself with time. If the leak does not stop, your surgeon may recommend Botox. Botox temporarily stops saliva being produced and gives the leak a chance to heal.
- **Facial weakness.** The nerve that controls the muscles of your face is called the facial nerve. This passes directly through the parotid gland. Damage to this nerve causes weakness in all or part of the face on that side. This is called a facial palsy. Usually, the facial nerve works normally after surgery. Inside the parotid gland, the facial nerve splits into smaller nerves. This makes it hard to remove the deeper part of the gland without pulling and pushing the facial nerve. This can bruise the nerve and cause temporary weakness. In rare cases, this can be permanent. There may be a temporary weakness in around 20 out of 100 cases when part of the gland is removed. When the whole gland is removed, temporary weakness affects 40 out of 100 cases. This weakness can be permanent in up to seven out of 100 cases of partial parotidectomy and up to nine out of 100 cases of total parotidectomy. This tends to affect one or more branches of the facial nerve. A permanent weakness of all branches of the facial nerve is rare. The risks can depend on the size of the lump, how deep it is, and how close it is to the nerve. Your surgeon will discuss these with you in more detail and will let you know their own complication rate.
- **First bite syndrome.** This is when you feel a sharp pain as you first bite into something. The pain then goes away after the first bite. First bite syndrome can be common. It affects up to 11 out of 100 cases. It is more likely if you have had your whole parotid gland removed. It may go away on its own over a few months or a year. There are medical treatments that can help with this problem.
- **Complications of general anaesthetic.** The operation is usually performed under a general anaesthetic. Complications can include blood clots in the legs (deep vein thrombosis) or lungs (pulmonary embolism), heart attack, chest infection, stroke and death. The pre-assessment team and anaesthetist will tell you what happens during a general anaesthetic and any risks that are relevant to you. [The linked document](#) explains the common events and risks of a general anaesthetic.

Will I have a drain in my neck?

A wound drain may be inserted (see '**What does surgery involve?**', above). Some units do not use drains. Your surgeon will let you know whether they usually insert a drain.

How long will I be in hospital?

Some units perform partial parotidectomy as a day case procedure. This means that if you are only having part of the gland removed, you may be able to go home the same day. Most patients spend one or two days in hospital. If you have a drain in your neck, you need to stay in hospital until it is removed. If you have a haematoma or wound infection, you may need to stay in hospital for more than 48 hours.

How long will I be off work?

We normally recommend taking two weeks off to recover fully. You should be feeling well in yourself the day after the operation. The reason we recommend taking two weeks off is so that you are not in contact with people at work who may have an infection. It is especially important if you work in a dusty environment.

Will I have a follow-up appointment?

Your surgical team will advise you on this.

Will my mouth be dry?

No. Removing a gland does not affect the production of saliva. There are other salivary glands in the mouth that will keep producing saliva.

Disclaimer: *This publication is designed for the information of patients. Whilst every effort has been made to ensure accuracy, the information contained may not be comprehensive and patients should not act upon it without seeking professional advice*

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