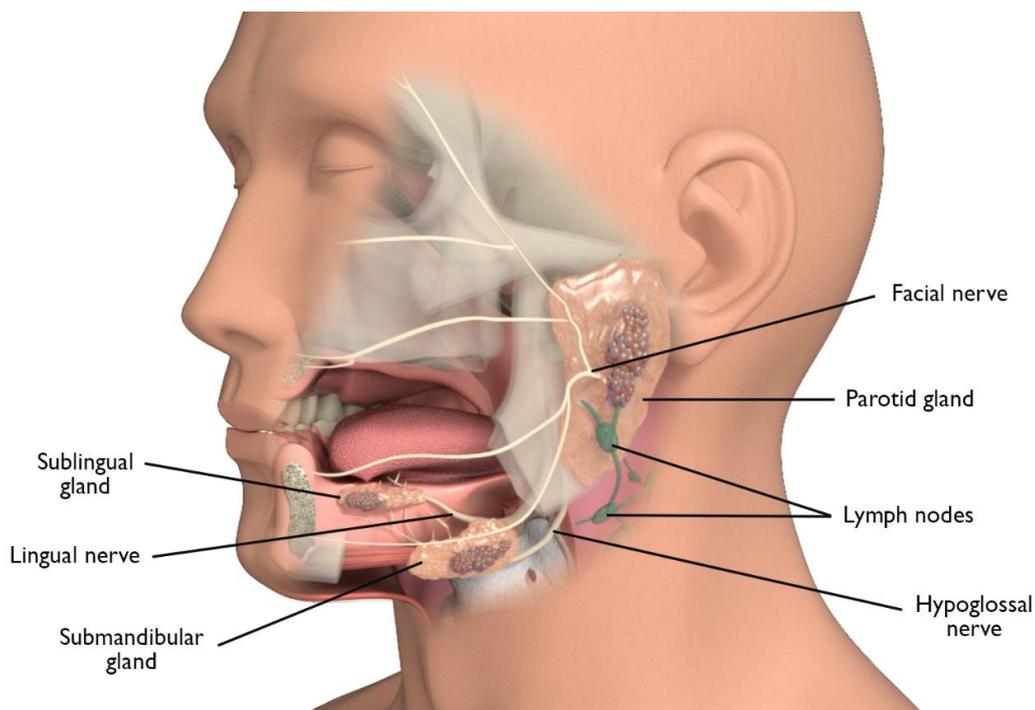


## PAROTIDECTOMY

This information aims to help you understand the operation, what is involved and some common complications that may occur. It may help answer some of your questions and help you think of other questions that you may want to ask your surgeon; it is not intended to replace advice or discussion between you and your cancer care team.

### AN OVERVIEW TO PAROTIDECTOMY

- The [parotid glands](#) are glands that make saliva and are found on each side of the face, in front of the ears (see diagram below). They are not the only salivary glands.
- The parotid gland is special because the nerve that controls the muscles of the face runs through the gland. This nerve is called the facial nerve and controls the muscles that:
  - raise eyebrows
  - close eyes
  - Smile and frown
  - Stops food from leaking out of the mouth
- Saliva helps keep the mouth moist, helps with swallowing, protects teeth and contains enzymes that aid in digestion.
- Saliva travels down a tube into the mouth called a 'duct'.



- A parotidectomy is the removal of some or all of a parotid gland. The operation is tailored to each person's needs and only some of the parotid may be removed depending on where the tumour has grown.
- As there are many salivary glands in the head and neck, saliva can still be produced after a parotidectomy.
- The tissue on the outer aspect of the facial nerve is called the superficial part and the tissue on the inner aspect is called the deep part of the parotid.
  - Surgery to remove a tumour on the outside of the facial nerve is called a superficial parotidectomy.
  - If tissue has to be removed from the deep part, the surgery may be very challenging and take much longer.
  - Sometimes the facial nerve has to be removed because a cancer has grown into the nerve. This is called facial nerve sacrifice or radical parotidectomy. You may want to download information about facial nerve sacrifice, which is available on the [Beyond Five website](#).

## WHY IS A PAROTIDECTOMY NEEDED

- A parotidectomy is most often done to remove a tumour from the parotid gland. Most parotid tumours are benign but cancers also grow in the parotid and are more likely to affect the facial nerve.
- The tumour together with an area of normal-appearing tissue is removed, to reduce the chance of any tumour cells being left behind. If the tumour is a cancer, then sometimes the lymph nodes in the neck will also be removed at the same time. This is called a [neck dissection](#). You may want to download information on neck dissection, which is available on the [Beyond Five website](#).
- If a cancer is large or affects the facial nerve, then sometimes the bone behind the ear needs to be removed and/or reconstructive surgery is necessary. More information regarding this can be found in [facial nerve sacrifice](#), [temporal bone resection](#) and [free flap reconstruction](#).
- Tissue removed from the parotidectomy will be examined in detail by a specialist pathologist, under a microscope to look for cancer cells and to determine whether additional treatment, such as radiation therapy, may be necessary. Through this examination, the [cancer can be accurately staged](#). Further information about staging of cancer is available on the [Beyond Five website](#).

## HOW TO PREPARE FOR THE OPERATION

### Before the operation:

- You will need to fast (have nothing to eat or drink) for 6 hours before your operation (unless advised differently by your surgeon or anaesthetist) because the parotidectomy is performed under a general anaesthetic (you will be asleep and will not remember what happens during the operation).
- Your surgeon will explain the details of your operation. Be sure to bring up any questions or concerns, and share your needs and wishes with the team (see box).
- You should speak to your doctor about how to manage aspects of your lifestyle, such as smoking, drinking alcohol and chronic conditions (e.g. diabetes and obesity) that may increase the risk of complications.
  - If you take blood thinning medication for a heart condition or blood clots (such as warfarin, Plavix, aspirin or Pradaxa®), make sure your surgeon is aware. Some of these medications need to be stopped more than a week before the operation. Sometimes a short-acting blood thinner (such as Clexane®) is used before and after the surgery.
- Talk to your surgeon and [cancer care team](#) about any likely side effects to expect following the operation. You may find it useful to talk to a dietitian, speech pathologist or specialist head and neck nurse about these issues.

#### **Possible questions that you may want to ask your cancer care team**

- How long will it take before I can eat again?
  - What kinds of food should I eat after the operation?
  - What will I look like after the surgery?
  - Will I need any reconstructive surgery?
  - What will happen if the nerve to my face is affected by the surgery?
  - Will my hearing be affected?
- Additional questions are listed at the end of this factsheet.

Visit the [Beyond Five website](#) for further information on the health professionals who may be part of your [cancer care team](#)

## **WHAT TO EXPECT DURING THE OPERATION**

- The operation usually takes about 2 hours, depending on how complex your operation may be. In some cases, the parotidectomy may be part of another operation.
- The surgeon will make a cut (incision) in front of your ear and down into the neck. The most common cut made follows a skin crease and usually heals very well so the scar is difficult to see. The cut will be longer if the lymph nodes in neck also need to be removed.
- During the operation, the surgeon will find the facial nerve and very carefully remove the tumour from around it.
- A nerve monitor may be used during the operation to help the surgeon protect the facial nerve. This involves placing small needles around the mouth and eye whilst under general anaesthetic.

## **WHAT TO EXPECT AFTER THE OPERATION**

- After the operation, once you are fully awake, you will be moved to a bed the hospital or intensive care unit (if you have a major operation).
- You will have surgical drains coming from the cut to allow blood or lymphatic fluid to escape and prevent swelling. These will be removed before you go home.
- Dressings will be checked and changed if needed.
- You may have a drip in your arm to give you fluid until you are able to drink.
- There is usually not much pain after parotidectomy but your anaesthetist and surgical team may give you medicine to help control any pain and nausea after the operation. Usually the skin around the wound will feel numb.
- Most patients stay in hospital for 1–2 days; if the parotidectomy is part of a more major procedure, you may need to stay in hospital for a longer period, usually 1–2 weeks.

## POSSIBLE RISKS OF PAROTIDECTOMY

All operations carry some risks such as blood clots, wound infections, bleeding, chest infection, adverse reactions to anaesthetic, and other complications. These risks will be explained by your cancer specialist and anaesthetist.

Your doctor will explain details of the operation, general risks and side effects of the operation, they may recommend:

- stopping blood thinners (e.g. aspirin) before surgery to reduce the risk of bleeding
- a blood thinner (called heparin) may be injected before and after surgery to reduce the risk of blood clots
- antibiotics to reduce to risk of wound infection
- early mobilisation to reduce the risk of blood clots and chest infection
- special stockings to reduce the risk of blood clots.

### Risks specific to parotidectomy:

Parotid surgery is very safe; however there are **three specific** complications to be aware of:

- **Facial weakness (palsy):** The facial nerve is responsible for all of the movement in the face including the muscles that raise the eyebrows, close the eyes and make your smile.
  - The facial nerve runs through the middle of the parotid gland and divides into many branches within the gland. If this nerve or one of its branches is injured you may be unable to smile, frown, close your eye, raise your eyebrow or form a seal with your lips when you eat or drink (on the affected side of your face). This is called a facial palsy and in most cases it gets better over a few weeks or months. Sometimes the nerve cannot be saved and must be removed due to the tumour growing around it. Visit the [Beyond Five website](#) to download information on facial nerve sacrifice.
  - The most susceptible branch of the facial nerve is the one which pulls down the lower lip when the mouth is wide open, or when you smile. However, the most important branch is the one to the eye. If this is not working you may be unable to close your eye or protect your eye with tears. It is very important for patients who cannot close their eye to do three things:
    - Use regular lubricating drops every hour (e.g. Systane®, Polytears®)
    - Put eye lubricant gel in at night (e.g. Lacrilube®)
    - Tape or pad the eye shut at night (use non-irritating tape, e.g. Micropore)

- **Salivary leak:** The parotid gland produces saliva and the raw edge of the gland may leak saliva following the surgery. Usually this is small and not noticeable, however in about 10% of patients this can present as a clear discharge from the wound.
  - It can be distinguished from an infection because it only discharges when eating, the fluid is clear and there is no fever, but there may be some irritation (redness) from the enzymes in the saliva.
  - Salivary leaks nearly always stop with time but can persist for weeks or months.
  - Some people may experience swelling under the skin caused by a build-up of saliva.
  - Sometimes the fluid is removed with a needle.
- **Frey's syndrome:** The parotid gland is supplied by nerves that signal for it to produce saliva. If these nerves grow back after parotidectomy into the sweat glands, the skin of the cheek may sweat when you eat.
  - This is called Frey's syndrome after Dr Frey who first described it.
  - It is common after parotid surgery, but in most patients it is so mild they don't know it is happening.
  - Occasionally this is noticeable and can be treated with antiperspirant applied to the skin of the cheek or with Botox (Botulinum toxin) injected under the skin.

## **SIDE EFFECTS AND THEIR MANAGEMENT**

As with all operations, there is a chance that parotidectomy may lead to a number of side effects. You may not experience all of the side effects. Speak with your doctor if you have any questions or concerns about treatment side effects.

Side effects common for parotidectomy may include:

- **Nausea:** General anaesthetic may cause nausea. This will settle down soon after the operation and can be treated with medications.
- **Sore throat:** Your throat may be sore initially because of the breathing tube placed during the operation.
- **Numbness near the ear:** After the operation, the skin on the side of the face and in front of the ear will be numb for some time. This gradually improves over months but the ear lobe usually stays numb.

Some people may also experience:

- **Bleeding or bruising:** There may be a blood clot or bruise underneath the skin in the area of the surgery. Occasionally an operation may be needed to remove this.
- **Pain when eating:** In a very small number of people, parotidectomy causes 'first bite syndrome'. This is pain with the first bite of a meal. It usually gets better over time.

## BEFORE GOING HOME

- Any particular instructions for [wound care](#) or medications will be provided to you before you go home. You may want to download further information about wound care, which is available on the [Beyond Five website](#).
- You will be assessed by the team involved in your care before you go home and follow-up will be arranged with your surgeon and GP.
- Your doctor may prescribe pain medications to help relieve the pain following the operation. Ensure you take the pain relief medications as prescribed by your doctor and speak to your cancer care team if the pain is not under control, gets worse or if the medication causes any side effects. You may want to download information about [pain management](#), which is available on the [Beyond Five website](#).
- If you have some facial weakness, you may need to tape your eyelid shut while you sleep and use eye drops every couple of hours; it is very important to keep the eye lubricated.

**Care of the wound:**

- Each surgeon will close the wound in their own way. Often the wound will have sutures under the skin that cannot be seen. These will dissolve over time and they do not need to be removed. Avoid wearing any tight or restrictive clothing around the neck for a few weeks after the operation.
- There may be a small sticky dressing (called a 'steri-strip') over the wound when you are discharged from hospital. Your doctor will have specific instructions regarding when the dressing should be removed and whether you can get the wound wet.
- There may be a waterproof 'glue' dressing (Dermabond) over the wound following the operation. This is a temporary cover to keep the wound clean; it can be peeled off after a week or so.
- At your first postoperative check, the surgeon will discuss what you can apply to the wound to help avoid a noticeable scar.

**Activities**

- For the first few days after arriving home from hospital, it is important to rest and not do any activities that involve moving the neck a lot. If possible, take one or two weeks off work depending on how labour-intensive work may be.
- Do not do any heavy lifting, strenuous exercise or contact sports for a month after the operation, although it is ok to go for walks as soon as you feel up to it. If you have small children it is recommended that you do not lift them for 1–2 weeks.
- You can drive after a week or as soon as you feel comfortable with the range of movement in your neck, but you must not drive if you feel that your ability is impaired.

### Symptoms to watch for after discharge from hospital

- **Significant swelling:** There may be some mild swelling after the operation. This is normal and may last for some weeks. However, if this becomes very noticeable and painful, contact the surgeon, your family doctor or the hospital.
- **Discharge from the wound:** If the wound becomes red, hot and starts to discharge you may have an infection and should contact the surgeon or your family doctor, as you may need antibiotics. If your wound discharges a clear fluid this may just be saliva.
- **Fever:** If you develop a fever contact your surgeon or your family doctor.

### FOLLOW-UP CARE

- After your operation, you will continue to have regular follow-up visits with your specialist doctor and cancer care team. If the tumour removed is benign (not cancer) then only one or two visits may be needed. However, if the tumour is a cancer then you will need long-term follow-up.
- Sometimes the diagnosis of parotid cancer has been made prior to the operation, based on a biopsy, so you are prepared for this result. However sometimes an unexpected cancer may be found. Should this happen, your treatment plan may change.
- Depending on the pathology report, it may be recommended that you have radiation therapy and/or chemotherapy treatment following the operation. You will be referred to doctors (oncologists) who specialise in cancer treatment.
- Follow-up may also be needed for any facial weakness, especially if your eye has been affected. Any additional reconstruction, cosmetic procedures or treatments that you may need are planned after discharge. This enables time for you to recover from the initial operation, get results of the pathology that examined the tissue removed at the operation, and make the arrangements for any additional treatment or next steps.

For further information about the operation for cancer and what to expect, you can also refer to [Understanding Surgery: a guide for people with cancer, their families and friends.](#)

## QUESTIONS TO ASK YOUR DOCTOR

- What sort of tumour do I have? Is it a cancer and where is it located?
- If the tumour is a cancer, what are the chances that the surgery will cure the cancer?
- What will happen if I don't have the surgery?
- Do I need a neck dissection?
- What lifestyle changes (diet, exercise) do you recommend I make?
- What are the possible side effects of treatment? How can they be prevented or managed?
- How long will I be in hospital and how long do I need off driving, work and exercise?
- Will the treatment affect my ability to eat, swallow or speak?
- Will I need a feeding tube?
- Will I need extra treatment after surgery?
- When will I get the pathology results?
- What follow-up tests will I need after the operation?
- Will I be able to lead a normal life?
- Am I suitable for any clinical trials?
- How much will the operation cost? Will my health insurance cover it?
- If I wanted to get a second opinion, can you provide all my medical details?

You may want to write specific questions here to ask your doctor or cancer care team

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