



HEAD & NECK CANCER
AUSTRALIA
ENGAGE • EDUCATE • EMPOWER

FACIAL NERVE SACRIFICE - RADICAL PAROTIDECTOMY



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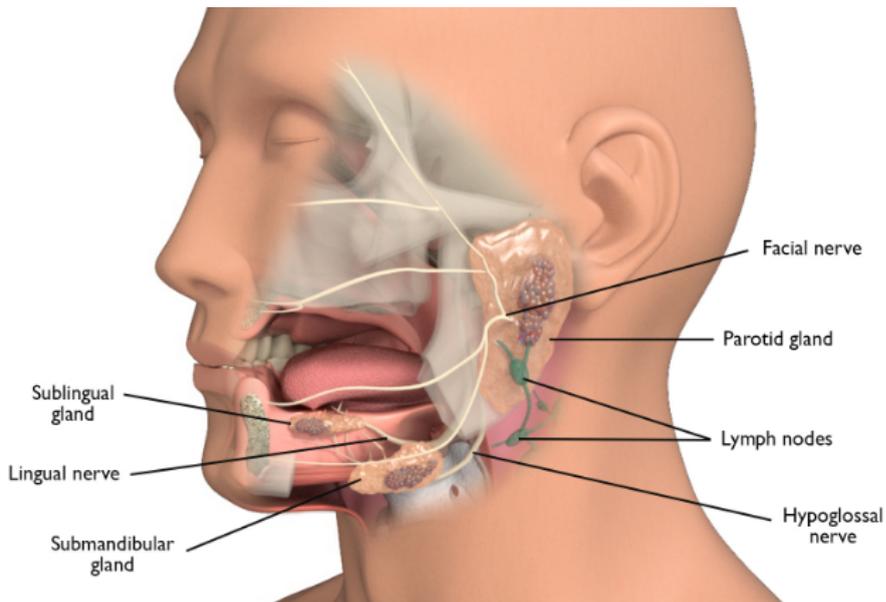
Facial nerve sacrifice – radical parotidectomy

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 cancer care team; it is not intended to replace advice or discussion between you and your [cancer care](#) team.

For further information about parotid gland cancer and what to expect, refer to the [Head and Neck Cancer Australia website](#).

AN OVERVIEW TO FACIAL NERVE SACRIFICE

- The facial nerve comes from a part of the brain called the brainstem (near the hearing and balance nerves), it passes through the bone behind the ear (temporal bone) and runs through the middle of the parotid gland.
- The [parotid glands](#) are glands that make saliva and are found on each side of the face, in front of the ears (see picture 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:
 - o raise eyebrows
 - o close eyes
 - o smile and frown
 - o stops food from leaking out of the mouth
- A **parotidectomy** is removal of some or all of a parotid gland; it sometimes also includes removing the facial nerve, which is known as facial nerve sacrifice or a radical parotidectomy.



Visit the [Head and Neck Cancer Australia website](#) to download information on parotidectomy and what to expect during and after the operation

WHY IS A FACIAL NERVE SACRIFICE NEEDED?

- Sometimes cancers grow into nerves and spread along the nerve. This is called *perineural invasion* and can occur in both parotid cancers and skin cancers.
- If a tumour (usually a cancer) cannot be safely separated from the facial nerve, the nerve may need to be removed with the tumour.
- The surgeon may know before the operation whether the facial nerve will need to be removed; this is usually indicated by the nerve, which may have stopped working properly, or when scans show that the cancer is 'wrapped around' the nerve.

HOW TO PREPARE FOR THE OPERATION

It can be hard to prepare for a facial palsy (losing control of the muscles of your face). Most people are scared about how they will look after the surgery. You may know someone who has a facial palsy – this is often called a ‘dropped face’. The most common causes of a facial palsy are Bell’s palsy, which usually gets better, and a stroke.

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 facial nerve sacrifice 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 your cancer care 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.

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

- What will I look like after the operation?
- What will happen when I try to close my eyes and when I blink?
- Will my eyes close when I am asleep?
- What will happen when I smile?
- Will the nerve to my face be reconstructed?
- Are there other procedures that can be done to help my eyes close and improve how I look after the surgery?
- Will I be able to eat after the surgery? When and what sort of food?
- Will my hearing or vision be affected?
- Will I need extra treatment such as radiation therapy or chemotherapy?
- What is the chance of cure? What percentage of patients are alive five or ten years after this surgery?
- Are there any alternatives to surgery?

Additional questions are listed at the end of this factsheet.

- Take the time to talk to your surgeon and [cancer care team](#) about how the operation is likely to affect your life. It may help to tell friends and family so they can support you before and after the surgery.

Visit the [Head and Neck Cancer Australia website](#) for further information on health professionals who may be part of your cancer care team

WHAT TO EXPECT DURING THE OPERATION

- The duration of the operation depends on how many different procedures are done and can range anywhere from 2 hours to more than 12 hours.
- The incision (cut) depends on the extent of the tumour, but usually involves an incision in front of the ear and down into the neck.
- Radical parotidectomy with facial nerve sacrifice may be combined with the following.
 - Removal of the lymph glands of the neck, called a [neck dissection](#). You may want to download information on neck dissection, which is available on the [Head and Neck Cancer Australia website](#).
 - Removal of the bone behind the ear, called a [temporal bone resection](#). You may want to download information on temporal bone resection, which is available on the [Head and Neck Cancer Australia website](#).
 - Reconstruction of the face using a [skin flap](#) if the skin around the ear was removed with the cancer. You may want to download information on reconstructive surgery (local flaps, regional flaps and soft tissue free flaps), which is available on the [Head and Neck Cancer Australia website](#).
- There are several procedures that can help when the facial nerve is removed. Sometimes these are done at the time of the tumour removal and sometimes they are done at a later stage. These procedures are called facial reanimation but nothing can fully replace the facial nerve.
 - **A brow lift** – the eye brow may droop down and interfere with vision
 - **Surgery to help with blinking and to protect the eye** – the most common procedures are an upper eyelid weight (made of gold or platinum), tightening of the lower eyelid to stop it drooping, and suturing the corner of the upper and lower eyelids together (called a tarsorrhaphy)

- **Facial nerve graft** – using another nerve to replace the facial nerve after it is removed
- **A mid face sling** – using tendons to stop the mouth from drooping
- **A muscle transfer** – using another muscle to help you smile

WHAT TO EXPECT AFTER THE OPERATION

- After the operation, once you are fully awake, you will be moved to a bed in 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. For longer operations there may also be a catheter in the bladder and/or a feeding tube placed through the nose and/or, occasionally, a tracheostomy tube. You may want to download information on feeding tubes and tracheostomy, which is available on the [Head and Neck Cancer Australia website](#).
- Most patients will need to have radiation therapy after the surgery (unless they have had it before).
- Your surgeon may arrange for you to see a *radiation oncologist* before the operation or attend the *head and neck multidisciplinary meeting* at the hospital.
- Most patients stay in hospital for 1–2 weeks.

POSSIBLE RISKS OF FACIAL NERVE SACRIFICE

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

SIDE EFFECTS AND THEIR MANAGEMENT

Facial nerve sacrifice will lead to a number of side effects. You may not experience all of these. Speak with your doctor if you have any questions or concerns about treatment side effects.

Side effects common for all operations 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.
- **Pain management:** Although radical parotidectomy is a big operation, it is not usually very painful. Most patients may feel uncomfortable. Your anaesthetist will give you pain medicine during the operation to keep you comfortable when you wake up, and you may continue on [pain medicines](#) to ensure pain is under control. Ensure you take 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 further information about pain management, which is available on the [Head and Neck Cancer Australia website](#).

Removing the **facial nerve** will mean that the muscles on one side of the face will be paralysed (stop working). The most important muscles are the ones that control blinking because they help protect and lubricate the eye. There are some practical things that can be done to help early in recovery. Nurses will help with these things during the stay in hospital, but it is also important that you learn how to do these things for yourself in preparation for when you go home.

- **Eye ointment and taping at night:** After the operation, the eye will not be able to close for sleeping. It is very important to protect the eye at night and stop it from drying out by placing a lubricating gel or ointment (e.g. Lacrilube®) in the eye before sleeping. The upper eyelid may also need to be taped down to the cheek (or a patch may be used to close the eye). Make sure the tape or patch does not rub on the eye. In the morning, vision may be blurry from the gel. Carefully wipe the ointment with a tissue and then use lubricating eye drops.
- **Regular eye drops:** Eye irritation is very common in patients with facial paralysis as blinking normally keeps the eye lubricated. When the eyelid does not close properly, the tears leak out before they have done their job. It is important to use regular lubricating



eye drops (such as Systane, Polytears or Tears Plus®). The eye drops have to be used very frequently, i.e. every one or two hours while awake and more in dry wind situations (or places with air-conditioning).

- **Thick fluids and small bites:** The muscles around the mouth may not open or close normally; this means that it may be difficult to get large pieces of food past the lips and/or there may be lip biting. Take the time to eat smaller portions to make this less frustrating. You may also find that food, especially thin watery liquids, may leak out as the lips are not able to seal tightly. Thicker consistencies, like puree, may be easier to keep inside.
- **Eyebrow droop:** The eyebrow may droop down and block partially block vision. Hospital tape, used with practice, can be used to pull the eyebrow up until a brow lift can be done. Check with your surgeon or cancer care team before doing this.

OTHER TREATMENT(S)

- Additional treatment(s) depend on the nature and extent of the cancer and history of radiation therapy
- Head and neck cancers often require treatment with more than one form of therapy to reduce the risk of the cancer recurring. Many patients need radiation therapy after the operation, and sometimes, may also require chemotherapy.
- Your [cancer care team](#) will be able to discuss the likelihood of needing further treatment before your operation but they cannot be sure until assessing the pathology report after removing the tumour.

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 on the [Head and Neck Cancer Australia website](#).
- Your doctor may prescribe pain medications to help relieve 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 further information about pain management, which is available on the [Head and Neck Cancer Australia 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.

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.
- **Changes in breathing or swallowing:** You should be able to breathe normally after your surgery. If you are having difficulty you must contact your surgeon, GP or go to the hospital emergency department.
- **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 is a cancer then you will need long-term follow up.
- 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.
- Sometimes referral to an eye specialist is arranged if your eye is painful or red.
- Any additional 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 are the chances that the surgery will cure the cancer?
- What will happen if I don't have the surgery?
- What are the possible side effects of treatment? How can they be prevented or managed?
- Will the treatment affect my ability to eat, swallow or speak? Will I need a feeding tube?
- Who can I call if I have any problems or questions?
- How much will the operation cost? Will my health insurance cover it?
- Will I be able to work again?
- What follow-up tests will I need after the operation?
- Am I suitable for any clinical trials?
- 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

About Head and Neck Cancer Australia

Head and Neck Cancer Australia (formerly Beyond Five) is Australia's only charity dedicated to providing information and support to people living with head and neck cancer, caregivers, family and healthcare professionals.

Head and Neck Cancer Australia's mission is to improve the quality of life of everyone affected by head and neck cancer through education and access to support and to raise awareness of head and neck cancer nationally.

Head and Neck Cancer Australia supports people through their cancer journey, from diagnosis to treatment and life after cancer by providing comprehensive, easy to understand and easy to access information. We have the only Directory of Head and Neck Cancer services and support groups available in Australia and New Zealand helping people to find the right services and support when they need it most.

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