Surgical Removal of a Malignancy of the Temporal Bone

This leaflet explains more about surgery for the removal of a Malignancy of the Temporal Bone, including the benefits, risks and any alternatives and what you can expect when you come to hospital. If you have any further questions, please speak to a doctor or nurse caring for you.

What is surgical removal of a malignancy of the temporal bone?

This is an uncommon and aggressive type of tumour and decision on treatment is always sought from a team of surgical and radiology consultants. The best outcome depends on a complete removal of the tumour with clear surgical margins (where no cancer cells are seen on or at the outer edge of the tissue that was removed) and then possibly to have radiotherapy, chemotherapy or chemo-radiotherapy.

The operation will be performed by an Ear, Nose & Throat surgeon although for the complete resection and reconstruction the help of a Neurosurgeon, a Maxillofacial surgeon and/or a Plastic surgeon may be needed.

This operation will be carried out under general anaesthetic. The approach and the resection needed will depend on the tumour size and location and can vary from a partial temporal bone resection, limited to the external auditory meatus, to the total removal of the temporal bone. Additional simultaneous procedures as pinna resection, parotidectomy, facial nerve resection, mandibulectomy and cervical lymphadenectomy may be performed. Treatment planning will include the reconstructive options to minimize postoperative complications.

All the possibilities will be discussed with you in clinic.

Why should I have surgery to remove my malignancy of the temporal bone?

Without treatment, these lesions result in a high incidence of morbidity and almost always prove fatal. Extension into the petrous bone can result in haemorrhage, hearing loss, dizziness, facial palsy, impaired voice and swallowing. Malignant spread into the skull may portend a grim prognosis even with aggressive surgical efforts.
What are the risks?

- The survival expectations depend on the extension of the disease. In this way, a successful resection of a tumour limited to external auditory canal without bony erosion or evidence of soft tissue extension has shown survival outcomes of 95%. The treatment of tumour eroding osseous external auditory canal with limited soft tissue involvement or tumour involving middle ear or mastoid has shown survivals of 85% when a clear surgical margin is combined with postoperative radiation therapy.

- The possible sequels are also conditioned to the extent of the surgery and should be discussed individually. This may include bleeding, which is a common risk factor in temporal bone resection.

- Surgery affecting the ear may result in different grades of hearing loss, tinnitus (ringing in the ear) and dizziness. While you may need some time to get used to the dizziness (this will improve with exercise), we can offer you several different devices to improve your hearing.

- Injury to the lower cranial nerves can result in problems with swallowing as well as your vocal cords and an inadequate swallow reflex.

- Facial nerve sacrifice or excessive manipulation of the nerve can result in facial asymmetry and inadequate eye closure. If this happens, the eye should be protected. Different surgical techniques may improve the final result.

- If the layer covering the brain is damaged it will need to be repaired and you may require a drain in your lower back to reduce the pressure in your head. If that fails then you may need another operation to stop the leak.

Are there any alternatives?

Although radiotherapy is another treatment option, the best result is when it is used as an additional treatment after a complete surgical resection with clear margins. Your consultant should have already discussed the different option with you in clinic.

How can I prepare for surgery?

You will have a preoperative assessment a few weeks before your operation. This will include a physical examination and blood tests. You may also have an electrocardiogram (ECG) and a chest x-ray. Smoking should be stopped. We can offer support and information about stopping smoking.

We will advise which medications you may need to stop before surgery.

You will be admitted into hospital the evening before your surgery.
Asking for your consent

It is important that you feel involved in decisions made about your care. For some treatments, you will be asked to sign a consent form to say that you agree to have the treatment and understand what it involves. You can withdraw your consent at any time, even if you have said 'yes' previously. If you would like more details about our consent process, please ask for a copy of our policy.

The ENT consultant or a senior member of their team will come and see you to talk to you about your operation, including any side effects or complications. They will give you a form to sign, which means you give your consent to have this procedure. Your surgeon will also sign this form. This is normally done on the morning of your surgery.

What happens during your stay in hospital?

On the day of your surgery:
You will be asked to stop eating six hours prior to surgery but we would encourage you to drink only clear fluids until two hours prior to surgery. The nurse will tell you when to stop eating and drinking before your operation.

You will be able to take your usual medication unless otherwise instructed.

You will be given a hospital gown to wear and anti-embolism stockings. These are special stockings which help prevent a deep vein thrombosis (DVT) developing in your legs. A DVT is a blood clot that can sometimes form in the veins of the legs due to prolonged lack of movement.

An anaesthetist will see you. An anaesthetist is a specialist doctor who is responsible for giving you your anaesthetic and caring for you throughout your operation.

During the operation:
This operation involves the use of general anaesthesia so you will not be awake or aware of your surgery. The operation normally lasts all day, about six to eight hours. Some of your hair will need to be shaved behind your ear so that the surgeon can clean the area.

Most likely there will be an incision (cut) behind the ear and this usually forms a C-shape of approximately 10-15 cm, which may be extended to the neck if neck lymph node surgery is needed. You will have sutures to the wound, which will stay in for 14 days after your operation and you will have a small dressing over this wound for the first few days. If a flap is needed for the closure, you will also have a wound on the donor area. This will also have sutures and may have a small drain. All wounds will be supervised and cleaned periodically.
Will I feel any pain?
You will be prescribed regular analgesia (pain killers) and if you are in pain then you should ask your nurse for some more medication in order to avoid this situation.

What happens after my surgery?
When you wake up after the operation you will be in the recovery unit or intensive care unit. A nurse who is experienced in caring for patients who have had brain and head and neck surgery will look after you. You will have an intravenous infusion (drip). This enables us to give you fluids and medication into a vein in your hand. If a tracheostomy tube (tube in your neck to help you breathe) or the placement of a gastrostomy tube (tube placed in your stomach to help with your nutrition) was inserted during your surgery, this will be removed in the following days depending on your recovery.

You will wear an oxygen mask until you have fully recovered from your anaesthetic, usually after a few hours.

Patients sometimes feel sick after having a general anaesthetic and may vomit. If you do feel sick, please tell a nurse and you will be offered medicine for this. This surgery also causes patients to feel nausea and dizziness, but we will give you medication to try to help reduce these.

At this time the different sequels after the surgery will be diagnosed and your nurse specialist and medical team will discuss the symptoms with you and will advise you on what treatment/care you will need to help you with the symptoms.

You will be seen by a physiotherapist to assess and help with your balance and mobility. They will provide you with exercises to do while in hospital and at home, which will help improve your symptoms. If they feel it is needed they will refer you to a community physiotherapist to see you after you go home.

The normal stay in hospital following this surgery is between 10-21 days depending on your recovery. You will be able to go home as soon as the medical team is happy with your progress and you feel ready to go home. We will want to ensure that you are able to manage at home, that you mobilise safely and that your wound is healing.

What do I need to do after I go home?
Tiredness and fatigue following surgery is quite usual. This may continue after you have left the hospital. You will have to adjust your activity to your energy level with a gradual increase.

Returning to work. You will have to take a period of time off work while you recover. This depends on your progress and the type of work you do.
If the removal of the tumour was extended intracranially, flying should be avoided for a number of weeks after this surgery. This depends on your post-operative condition and progress. Please ask your surgeon for when it is safe for you to fly.

Driving: There are no legal requirements for not driving following surgery of this kind however you most likely will initially not feel like driving. You do not have to inform the DVLA that you have had surgery, unless specifically instructed to do so by a medical team. The DVLA’s advice is that you do not return to driving until ‘fully recovered from the surgery.’

**Will I have a follow-up appointment?**

Everything concerning your follow up and further treatment will be decided in a multidisciplinary team meeting and you will be informed of the outcome of these meetings.

**Contact us**

If you have any question or concerns then please contact the Clinical Nurse specialist during Working hours of Monday to Friday 8.30am to 4.30pm.

- Telephone: 020 8725 4468
- Email: stgh-tr.skullbase@nhs.net
- Urgently on Bleep 7171 via switchboard on 020 8672 1255

You can contact the ward outside of normal working hours if there is anything you are concerned about.

- Brodie ward: 020 8725 4646/4647
- McKissock ward: 020 8725 4644/4645

Other useful contact numbers:

- Neurosurgical Bed Manager: 020 8672 1255 Bleep 7251
- Mr Patel & Mr Martin secretary: 020 8725 4172
- Mr Stapleton secretary: 020 8725 4508
- Mr Minhas secretary: 020 8725 4524

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.stgeorges.nhs.uk](http://www.stgeorges.nhs.uk)
Additional services

**Patient Advice and Liaison Service (PALS)**
PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).
Tel: 020 8725 2453    Email: pals@stgeorges.nhs.uk

**NHS Choices**
NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health. Web: [www.nhs.uk](http://www.nhs.uk)

**NHS 111**
You can call 111 when you need medical help fast but it’s not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.
Tel: 111

**AccessAble**
You can download accessibility guides for all of our services by searching ‘St George’s Hospital’ on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.

---

Reference: NEU_SRMTB_01    Published: March 2019    Review date: March 2021