

Surgical Removal of a Paraganglioma of the Temporal Bone

This leaflet explains more about surgery for the removal of a paraganglioma 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 Paraganglioma?

Paragangliomas are usually benign tumours developed from the glomous cells. They are usually benign and are usually found in the head, abdomen, chest and neck areas.

The operation will be performed by both a neurosurgeon and Ear, Nose & Throat surgeon and will be carried out under general anaesthetic. The approach to get to the tumour will depend on the tumour size and location; this will have been discussed with you in clinic by your surgeon.

The most common approaches are mastoid–extended facial recess approach and mastoid-neck with infratemporal fossa approach. An incision is made behind the ear and a removal of a different amount of the temporal bone is performed and the facial nerve may be rerouted in order to grant access to the tumour. Between 24 to 48 hours previous to the surgery you will have an embolization (blocking off the blood supply) of the tumour to reduce the bleeding during surgery. Occasionally if the tumour is limited to the middle ear, the surgeon may remove it through your external ear canal and avoid the embolization.

Most of the temporal bone paragangliomas can usually be completely removed. However, others can be affecting important cranial nerves and a small part may be left behind to minimise the risk of damaging them.

Why should I have surgery to remove my temporal bone paraganglioma?

You will be offered surgery to remove your temporal paraganglioma because it is a tumour that may grow affecting different cranial nerves and metastasize (spread). Surgery is required to prevent the tumour from pushing on your brain and or causing damage to important surrounding nerves and structures. Your consultant should have already discussed the option of radiotherapy and why this is not suitable for your tumour.

What are the risks?

- 85% to 90% success with total removal of the tumour.
- 95% of patients who had facial nerve rerouting have a mild to moderate facial palsy.
- Hearing loss.
- Voice impairment. Nearly 20% of patients require a vocal cord augmentation procedure.
- Difficulties in swallowing.

- Haemorrhage.

Are there any alternatives?

Your consultant should have already discussed the different options with you in clinic. Radiotherapy is an option but not the modality of choice for treatment. Although tumour reductions after radiotherapy have been recorded, temporal paragangliomas have non-uniform responses, and tumour sterilization by radiotherapy is infrequent.

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. If you smoke, we strongly advise you to stop, as this will help your recovery as well as your general health. 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 surgery. In some cases, you will be admitted two days before your surgery in order to have the embolization of the tumour and reduce the bleeding during the surgery.

Asking for your consent

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 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 clear fluids only 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 this usually forms a C shape of approximately 10-15cm and may be extended to the neck. You will have sutures to the wound, which will stay in for 14 days after your operation. You will have a small dressing over this wound

for the first few days.

Will I feel any pain?

You may have headaches. You will be prescribed regular analgesia and if you are in pain then ask your nurse for some medication.

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 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. This will be removed by a nurse when you feel able to eat and drink normally, usually the next day.

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 feel sick, please tell a nurse and you will be offered medicine for this.

Following the surgery you may have one or more of the following:

- Headache
- Hearing loss
- Facial nerve weakness
- Incomplete eye closure, dryness or excess fluid in the eye
- Balance problems
- Fatigue / tiredness.

Your nurse specialist and medical team will discuss these 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 exercise to do while in hospital and at home which will help improve your balance and mobility. 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 10-14 days depending on our 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 your wound is healing and that you are able to mobilise safely.

What do I need to do after I go home?

Tiredness and fatigue following surgery are quite usual. You will have to adjust your activity to your energy level; a gradual increase in your activity will help. Please remember that you have had major surgery to your head.

Returning to work: you will have to take a period of time off work while you recover, depending on your progress and the type of work you do.

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 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.' This varies enormously between patients and depends on your ability to perform an emergency stop, being able to glance in your mirrors and being able to look right and left without feeling nauseous and dizzy. Once you feel able to do these, you are able to return to driving. To begin with, only drive short distances, and gradually increase the distance.

Will I have a follow-up appointment?

The surgeons would like to review you in an outpatient's clinic around six weeks after surgery. You will be sent this appointment in the post. You will have an MRI scan after your operation.

Contact us

- If you have any question or concerns then please contact the Clinical Nurse specialist during Working hours of Monday to Friday 08.30 -16.30. Telephone :020 8725 4468
- Email: stgh-tr.skullbase@nhs.net
- Urgently on Bleep 7171 via switch 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
- Miss Little secretary: 020 8725 2052
- 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

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 Wing (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

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