

Surgical Closure of a Temporal Bone Cerebrospinal Fluid (CSF) Leak

This leaflet explains more about surgery for the closure of a Temporal Bone Cerebrospinal Fluid leak, 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 closure of a Temporal Bone CSF Leak?

The operation will be performed by both a neurosurgeon and an Ear, Nose & Throat surgeon. This operation is performed under general anaesthetic. The approach to access the leak will depend on the size and location of the defect and; this will have been discussed with you in clinic by your surgeon. The most common approach is a post-auricular approach; an incision is made behind the ear, removing part of your ear bone, therefore you may lose some hearing. Occasionally the surgeon may feel a Middle Fossa approach is more appropriate (a vertical incision is made over your ear and involves going through your skull). In both situations a graft of tissue will be taken from your thigh and put into the surgical wound behind your ear to seal the closure.

In some cases a lumbar drain may be needed to reduce the pressure in the brain and allow for healing of the operative site.

Why should I have surgery to close my CSF Leak?

You have been offered surgery to close a CSF Leak because conservative management has failed and/or you have had recurrent meningitis.

What are the risks?

- Recurrence.
- Hearing Loss.
- Imbalance.
- Infection and meningitis.
- Headaches.

Are there any alternatives?

Your consultant should have already discussed the different options 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. 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 how to stop 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

The Neurosurgical and ENT consultant or a senior member of their team will visit 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 or "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.

You will be reviewed by your Surgical, Anaesthetic team and the Clinical Nurse Specialist, who will go through the nature of the surgery in detail and help answer any questions you or your family might have.

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 about four hours. Some of your hair will need to be shaved behind or over 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. 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. You will also have a wound on your thigh; this is from where a graft of tissue is taken and put into the surgical wound behind your ear. This will also have sutures and may have a small drain in it for a day or two after your operation.

Will I feel any pain?

You may have headaches and may have pain in your leg from where the tissue was taken.

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 Neuro 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.

If a lumbar drain was needed, you will be asked to remain lying on your back for a few days. The duration of this position will be decided depending on your recovery.

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

- Headache
- Nausea
- Hearing loss
- Cerebro-Spinal Fluid (CSF) Leakage
- Balance Problems.

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.

If needed, 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 balance and mobility.

The normal stay in hospital following this surgery is between 10-14 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 your wound is healing, there is no CSF leak and that you are able to mobilise safely.

What do I need to do after I go home?

Tiredness and fatigue following surgery is quite usual. You will have to adjust your activity to your energy level; a gradual increase in your activity will help.

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 which 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: If you had a middle fossa approach, you have to inform the DVLA that you have had this type of surgery. If the surgery was performed through a post-auricular approach, you will not have to inform the DVLA, unless specifically instructed to do so by a medical team. There are no legal requirements for not driving following surgery of this kind however initially it is most likely that you will not feel like driving.

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.

Contact us

If you have any question or concerns then please contact the Clinical Nurse specialist during working hours of Monday to Friday 8.00am to 4.00pm.

- Telephone: 020 8725 4468
- Email: stgh-tr.skullbase@nhs.net or Veronica.Barnes@stgeorges.nhs.uk
- Urgently on Bleep 7171 via switch on 020 8672 1255

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

- 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 and 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

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

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.

