

Neuroscience Unit

Craniotomy: Information for patients and relatives.

This booklet is intended to provide general information about the surgical procedure known as craniotomy. It has been written to answer some of the questions asked by people who will be having a craniotomy, as well as for their families and carers. However, because this procedure affects each person differently, it is important that you speak to the doctor or nurse who is looking after you since they are in a position to offer advice and information to meet your own specific needs.

What is a craniotomy?

A craniotomy is an operation to open the head in order to expose the brain. The word craniotomy means making a hole (-otomy) in the skull (cranium). This operation is carried out in hospital by a neurosurgeon, who is a specialist in surgery of the brain and spinal cord.

Why do I need a craniotomy?

A craniotomy is necessary to deal surgically with a number of abnormalities of the brain and its surrounding structures.

The following are a few examples of the types of condition for which a craniotomy is commonly carried out.

- Severe head injury, which results in a blood clot pressing on the brain. If the blood clot is formed between the membranes surrounding the brain, it is known as a subdural haematoma. If the blood clot is between the inside of the skull and the outer membrane covering the brain, it is known as an extradural haematoma.
- A growth or tumour arising either from the membranes surrounding the brain (for example, a meningioma) or from within the brain (for example, a glioma). Any such growth can cause pressure on the



Patient Information

brain.

- Bleeding inside or on the surface of the brain caused by leakage from abnormal blood vessels, for example, a subarachnoid haemorrhage.

Booklets giving detailed information on head injury, brain tumour and subarachnoid haemorrhage are also available.

What happens during the operation?

The operation is carried out under a general anaesthetic. You will be asleep and will not feel anything. It will be necessary to shave a small section of the head. The place, size and shape of the skin incision vary according to the type of operation.

The incision is usually placed behind the hairline to hide the scar although this is not always possible. The scar will fade to a pale thin line within three to six months and the hair will usually grow back normally where it has been shaved.

To gain access to the brain a small section of the skull is temporarily removed. The precise location of the opening is decided after careful consideration of brain scans and other investigations that have been carried out before the operation.

Once the opening has been made, the lesion (abnormal tissue or growth) is then removed or treated.

After the surgery has been completed, the bone is then replaced to cover the hole that has been made.

What will happen after the operation?

You will usually be woken up as soon as the operation is over. You will regain consciousness in the recovery area where special nurses monitor your progress very closely. If everything remains stable, you will be transferred back to the Step Down Unit.

Patient Information

Occasionally, if intensive monitoring is required after the operation, you may be transferred to an intensive therapy unit. You may then be kept asleep on a breathing machine for a period after the operation to allow your brain to recover. If this is likely to be necessary, your surgeon will discuss it with you before the operation takes place.

Once you have been transferred back to the ward, you will be observed and monitored carefully. You will be given fluids through a drip into your vein. You may also have a drain to remove any fluid oozing from the wound.

Sometimes a fine tube (catheter) is placed into the bladder to help you pass urine. All of these tubes will gradually be removed as your condition improves.

What are the possible after effects of craniotomy?

Problems that can occur shortly after the operation:

- Occasionally, a blood clot may form at the site of the operation. If this happens, depending on its size, you may need a second operation to remove it. However this is a rare complication.
- After brain surgery there is a small risk of developing fits (epileptic seizures). To prevent this, anti-epilepsy medication is sometimes prescribed for some months following the operation.
- As the wound in your head heals, it may feel painful at first. This gradually improves and is usually better by the time the clips are removed, five to seven days after the operation.
- Later on, the skin around the edges of the wound may feel a bit numb until the healing is complete. This numbness may itself be painful or unpleasant for a while.
- Wound infection is not usually a problem and in order to prevent it, you will often be treated with antibiotics around the time of the operation.

How long does recovery take?

Recovery time depends on the underlying condition and on whether there were any complications during or after the operation. Normally, you can

Patient Information

expect to stay in hospital for five to 10 days and rest at home for a further six to 12 weeks.

For people who have problems related to their underlying condition, there may be a need for a longer hospital stay and further care in a rehabilitation unit.

How will life be affected?

After a craniotomy, the driving regulations require your licence to be suspended. In the meantime, you should inform the DVLA about your operation (see “Other organisations that may be able to help”). The DVLA will enquire about your medical condition and inform you about the period of driving restriction. This is determined by the underlying condition that led to the operation and complications such as epilepsy or other factors that could affect your ability to drive safely.

You are advised to avoid flying until you have been reviewed by your Consultant Neurosurgeon.

Contact sports such as boxing or rugby should be avoided after any brain operation. Swimming is fine once the wound has healed, but it is a good idea to be accompanied for the first few months because of the risk of fits occurring.

The timing of a return to work and other activities will need to be discussed with the Consultant responsible for your care.

Sexual intercourse is safe once you have recovered from the operation.

Small amounts of alcohol are safe, although you are likely to be more susceptible to its effects. There is a risk of provoking a fit if you have too much to drink. Some people who have had a craniotomy have found that they have more severe hangovers if they drink alcohol.

Although having a craniotomy is a significant procedure, modern surgical techniques and specialised after care mean that most people make a good recovery and can get back to their normal lives within a few weeks of the operation

Other organisations that may be able to help:

Brain and Spine Helpline

Brain and Spine Foundation

LGO1 Lincoln House

Kennington Park

1–3 Brixton Road

London SW9 6DE

Tel: 0808 808 1000

www.brainandspine.org.uk (Information and support on neurological disorders for patients, carers and health professionals)

Brain and Spinal Injury Charity (BASIC)

Neurocare Centre

554 Eccles New Road

Salford

Greater Manchester

M5 5AP

Tel: 0870 750 0000

www.basiccharity.org.uk (Information, research and support groups)

DVLA Drivers Medical Group

DVLA Longview Road,

Swansea

SA99 1TU

Tel: 0300 790 6806

(Fitness to drive)

Patient Information

Headway

Bradbury House

190 Bagnall Road

Old Basford

Nottingham

NG6 8SF

Tel: 0808 800 2244

www.headway.org.uk

NHS 111

111 is the NHS non-emergency number. Call 111 and speak to a highly trained adviser, supported by healthcare professionals. They will ask you a series of questions to assess your symptoms and immediately direct you to the best medical care for you.

NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

Local Contacts:

Neurosurgical Unit,

Ward 43,

4th Floor Central Tower,

UHCW NHS Trust,

Tel; 024 7696 4000 EXT 28240 or Ext 25330

Headway Coventry and Warwickshire

Email: headwaycw@aol.co.uk

Tel: 0808 800 2244

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Patient Information

The Trust has access to interpreting and translation services. If you need this information in another language or format, please contact 024 7696 8240 and we will do our best to meet your needs.

The Trust operates a smoke free policy

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