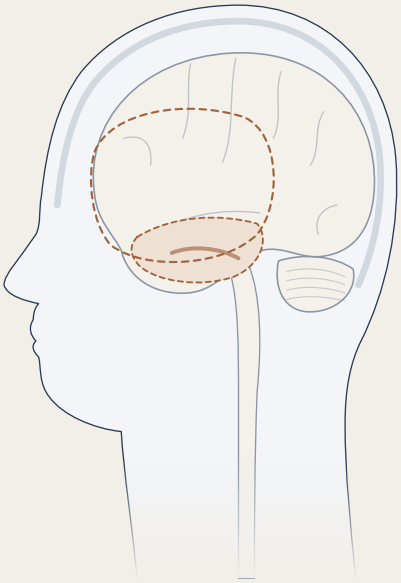
Professor Jason John Labuschagne
PAEDIATRIC AND ADULT NEUROSURGEON

FUNCTIONAL NEUROSURGERY

Resective Epilepsy Surgery

Patient information and consent



This booklet explains surgery to remove the area of the brain where seizures begin. It is written for adults and for parents of children having epilepsy surgery. Where the patient is a child, 'you' refers to your child, and the consent is signed by a parent or guardian. Please read it with your family, write down your questions and bring it to your consultation. You will be asked to sign the consent section only once you understand the proposed treatment and are satisfied that your questions have been answered.

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PATIENT DETAILS OR HOSPITAL LABEL

Patient name

Date of birth

ID / file no.

Procedure date

Version 1.0 · October 2026

Netcare Unitas Hospital
Room 403, Centurion

Nelson Mandela Children's Hospital
Private Suites, First Floor, 6 Jubilee Road, Parktown North

012 664 6026
HPCSA MP 0530077

01 General information

Why is surgery considered?

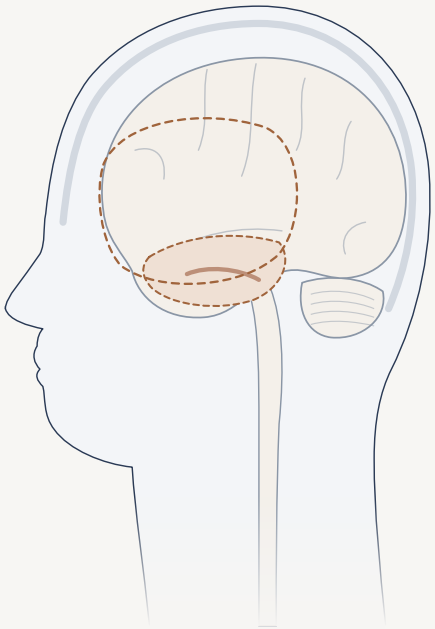
Most people with epilepsy have good seizure control with medication. When seizures continue despite trials of two or more appropriate medicines, the epilepsy is called drug-resistant, and further medicines are unlikely to stop the seizures. In some of these patients, the seizures start in one particular area of the brain. If that area can be removed safely, surgery offers the best chance of becoming seizure-free, as well as improving quality of life, development in children, and safety.

How is the seizure focus found?

Before surgery, a team including a neurologist or paediatric neurologist, a neuropsychologist, a radiologist and Professor Labuschagne reviews detailed tests: video-EEG monitoring to record seizures, a high-resolution MRI, memory and language testing, and sometimes PET or SPECT scans or functional MRI. If the focus is still uncertain, electrodes may be placed on or in the brain for a period of monitoring (invasive EEG or SEEG), which requires a separate operation and consent.

What does the operation involve?

Under a general anaesthetic, you are positioned so that the area of interest is uppermost, and the head is usually held still in a pin head-holder. A narrow strip of hair is clipped, the skin is cleaned with antiseptic and local anaesthetic is injected. A scalp flap is opened, a window of bone is lifted, and the covering of the brain (dura) is opened. Computer navigation, linked to your scans, is often used to plan the incision and locate the lesion. At the end, the dura is closed, the bone is replaced and secured with small titanium plates and screws, and the scalp is closed with stitches or staples.



A common example: the seizure focus lies in the inner part of the temporal lobe (shaded). The dashed line shows the bone window.

The planned area is then removed under the microscope. Depending on the findings, this may be part of the temporal lobe with the hippocampus and amygdala, a lesion such as a cavernoma or area of cortical dysplasia with the surrounding abnormal brain, or a larger area. Recording from the brain surface (electrocorticography) and mapping of function may be used during the operation.

02 Alternatives to surgery

- **Continuing or changing medication**, accepting that the chance of becoming seizure-free with further drugs is low.

- **Vagus nerve stimulation (VNS)**, which reduces seizure frequency in many patients but rarely stops seizures completely.
- **Laser ablation or radiofrequency thermocoagulation**, less invasive options for selected small targets where available.
- **The ketogenic diet**, mainly in children.
- **Disconnection procedures** such as corpus callosotomy or hemispherotomy, for particular types of epilepsy.

03 What to expect during and following surgery

Before admission

- Tell us about any bleeding or clotting problems, recent illness, allergies and all medicines, including herbal remedies.
- Blood-thinning medicines (for example warfarin, aspirin, clopidogrel or the newer anticoagulants) and anti-inflammatories usually need to be stopped before surgery. Please follow the specific instructions you are given and do not stop any medication without advice.
- You will usually be admitted on the day of surgery or the day before, and must not eat from midnight before surgery, or as instructed by the anaesthetist.

In hospital

You wake up in the recovery room and are then transferred to the ward, or to a high-care or intensive care unit for the first night. Nurses will regularly check your pulse, blood pressure, limb strength, pupils and level of alertness to detect any change early, and you will be woken for these checks during the first night.

- You will have regular pain relief and anti-nausea medicine.
- A drip and sometimes a urinary catheter are usually removed within a day or so.
- You will be encouraged to sit out of bed and walk on the day after surgery.
- Continue your **seizure medication** exactly as before; it is not stopped after surgery.
- An **MRI** is done to confirm the extent of removal.
- **Going home.** Most patients go home after four to seven days.

04 Risks and complications

All surgery carries risk. Most patients do not experience serious complications, but it is important that you understand what can happen. The list is not exhaustive; Professor Labuschagne will discuss the risks that apply particularly to you. The risks of the anaesthetic will be explained separately by the anaesthetist.

Common

●●●

- Headache, nausea and tiredness.
- Swelling and bruising of the face and eyelid.
- Seizures in the first days, which do not necessarily mean the operation has failed.

Less common

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- **Seizures**, which may need medication.
- **Wound infection**, or infection of the bone flap, occasionally needing removal of the bone.
- **Leakage of cerebrospinal fluid** from the wound.
- **Blood clots in the legs or lungs (DVT/PE)**, reduced by stockings, early walking and blood thinners.
- General complications such as pneumonia, urinary infection or heart problems.
- **Seizures not controlled**, or returning later; a proportion of patients are improved but not seizure-free.
- **Memory or word-finding difficulties**, particularly after surgery on the dominant temporal lobe.
- Low mood, anxiety or other emotional changes; pre-existing psychiatric conditions may change.
- **A visual field defect**: loss of part of the upper outer field of vision on the opposite side after temporal lobe surgery, which may affect fitness to drive.

Rare but serious

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- **Bleeding** within the brain or around it, which may need a return to theatre.
- **Stroke**, causing weakness, speech or vision problems that may be permanent.
- **Brain swelling** or hydrocephalus.
- Meningitis.
- Weakness, speech or vision loss from injury to brain or blood vessels.
- Double vision from injury to an eye movement nerve.
- Coma or death. These are rare.

RISKS AND EXPECTED OUTCOME PARTICULAR TO MY SURGERY (TO BE COMPLETED BY PROFESSOR LABUSCHAGNE)

05 After the operation: what is normal

- **Headache** that changes in character as the bone and scalp heal, usually settling over several weeks.
- **Swelling and bruising** around the eye or face on the side of the operation, worst on the second or third day.
- **Numbness** around the scar, which usually shrinks over months.
- **Jaw stiffness** when chewing, if the muscle at the temple was opened.
- **Tiredness, poor concentration and low mood**, which can last weeks to months. A clicking or fluid sensation under the bone flap for a few weeks is common.

06 Recovery

- **Wound.** Stitches or staples are removed at about seven to ten days. You may shower and gently wash your hair after about three to five days unless told otherwise.
- **Activity.** Walk daily and increase activity gradually. Avoid heavy lifting, contact sport and swimming until reviewed.
- **Medication.** Steroids, if used, are reduced gradually as directed; do not stop seizure medication without advice.
- **Driving.** Driving depends on seizure freedom after surgery and on the regulations; please do not drive until advised.
- **Medication.** Seizure medication is usually continued for at least one to two years and reduced only under specialist guidance.
- **Follow-up.** With Professor Labuschagne and your neurologist, with repeat EEG, MRI and neuropsychology testing.

07 When to contact the rooms

Please contact the rooms the same day, or go to the nearest emergency department, if you notice:

- Increasing headache not relieved by your usual pain relief
- Increasing drowsiness or confusion
- A seizure (fit), or a fainting spell
- New or worsening weakness, numbness or difficulty walking
- New difficulty speaking or understanding
- New problems with vision
- Persistent nausea or vomiting
- Fever, chills or a stiff neck
- Redness, swelling, discharge or clear fluid leaking from the wound
- Calf pain or swelling, chest pain or shortness of breath

IN AN EMERGENCY

If you have a seizure that does not stop, a sudden severe headache, collapse, chest pain or difficulty breathing, call an ambulance or go to the nearest emergency department immediately. Tell the staff about your recent operation and ask them to contact Professor Labuschagne.

THE ROOMS · OFFICE HOURS

012 664 6026

Elective appointments and queries, office hours, for both Netcare Unitas Hospital and Nelson Mandela Children's Hospital

AFTER HOURS

After hours, call the hospital switchboard and ask for Professor Labuschagne: Netcare Unitas Hospital 012 677 8000 · Nelson Mandela Children's Hospital 010 133 0600

Emergency services: Netcare 911 · 082 911 | National ambulance · 10177

NETCARE UNITAS HOSPITAL

Room 403, Netcare Unitas Hospital
866 Clifton Avenue, Lyttelton, Centurion

NELSON MANDELA CHILDREN'S HOSPITAL

Private Suites, First Floor
6 Jubilee Road, Parktown North, Johannesburg

08 Consent

Informed consent is a conversation, not simply a signature. The National Health Act 61 of 2003 and the ethical guidelines of the Health Professions Council of South Africa (HPCSA) give every patient the right to be told, in a language they understand, about their condition, the treatment options available, the benefits, risks, costs and consequences of each, and the right to refuse treatment. You may withdraw your consent at any time before the operation.

If you are unable to give consent yourself, the National Health Act (section 7) allows consent to be given by a person you have authorised in writing or, failing that, by your spouse or partner, parent, grandparent, adult child or sibling, in that order.

THE PROCEDURE

Procedure Craniotomy for resection of epileptogenic focus Side / site _____

Condition, in my own words _____

SPECIFIC PERMISSIONS

Blood transfusion, if needed during or after surgery	☐ I agree	☐ I do not agree
Tissue or fluid removed may be sent for laboratory examination	☐ I agree	☐ I do not agree
Anonymised images or results may be used for teaching and research (optional)	☐ Yes	☐ No

Questions I have discussed

Please write down any questions you asked and any particular concerns that were discussed.

My acknowledgement

Please tick each statement.

- ☐ I have read this document, or it has been read to me, and I understand it.
- ☐ Professor Labuschagne has explained my condition, the proposed procedure, its expected benefits, and the alternatives, including the option of no treatment.
- ☐ The risks and possible complications, including those particular to me, have been explained in language I understand.
- ☐ I have had the opportunity to ask questions and raise concerns, and these have been answered to my satisfaction.
- ☐ I understand that no guarantee has been given about the outcome, and that the procedure may not improve, and could worsen, the condition.
- ☐ I understand that if an unexpected finding or a life-threatening event occurs during the procedure, the surgeon may carry out further treatment that is necessary to protect life or prevent serious harm.
- ☐ I understand that the anaesthetic will be explained by the anaesthetist, who will obtain consent for it separately.

- [ ] I understand that my medical scheme may not cover the full cost of treatment, that I am responsible for any shortfall, that separate accounts will be rendered by the hospital and the anaesthetist, and that a quotation is available on request.
- [ ] On the basis of the above, I request that I undergo the procedure described.

PATIENT

Full name _____ ID number _____

Signature _____ Date and time _____

If the patient is unable to consent: person consenting on the patient's behalf (National Health Act, section 7)

Full name _____ Relationship _____

Signature _____ Date and time _____

SURGEON'S STATEMENT

I have explained the patient's condition, the need for treatment, the proposed procedure and its expected benefits, the material risks including those specific to this patient, the reasonable alternatives including no treatment, and the likely consequences if those risks occur. I have offered the opportunity to ask questions and have answered them as fully as possible.

Surgeon Professor Jason John Labuschagne HPCSA no. MP 0530077

Signature _____ Date and time _____

INTERPRETER (IF USED)

I have accurately interpreted the contents of this document and the discussion between the doctor and the patient.

Full name _____ Language _____

Signature _____ Date _____

WITNESS

Full name _____ Capacity _____

Signature _____ Date _____

A copy of this signed document will be kept in the medical record and a copy offered to the patient. Personal information is processed in accordance with the Protection of Personal Information Act 4 of 2013. · Professor Jason John Labuschagne · HPCSA MP 0530077 · Version 1.0 · October 2026