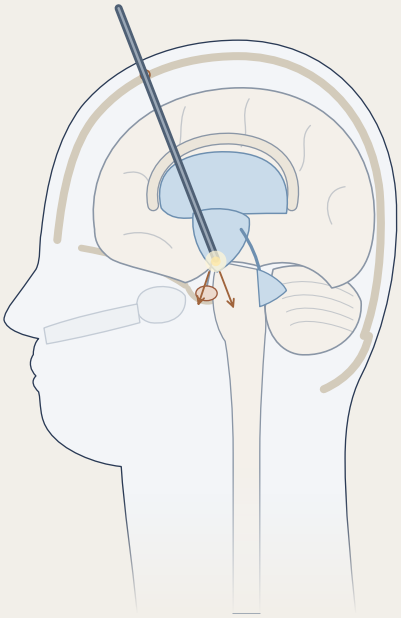
Professor Jason John Labuschagne
PAEDIATRIC AND ADULT NEUROSURGEON

PAEDIATRIC NEUROSURGERY

Endoscopic Third Ventriculostomy

Information and consent for parents and guardians



This booklet explains endoscopic third ventriculostomy (ETV), with or without choroid plexus cauterisation (CPC), as a treatment for hydrocephalus. Please read it at home, in your own time, and write down anything you would like to ask. You will only be asked to sign the consent section once all of your questions have been answered and you feel ready.

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PATIENT DETAILS OR HOSPITAL LABEL

Child's name

Date of birth

Parent / guardian

Hospital / file no.

Version 1.0 · October 2026

Netcare Unitas Hospital
Room 403, Centurion

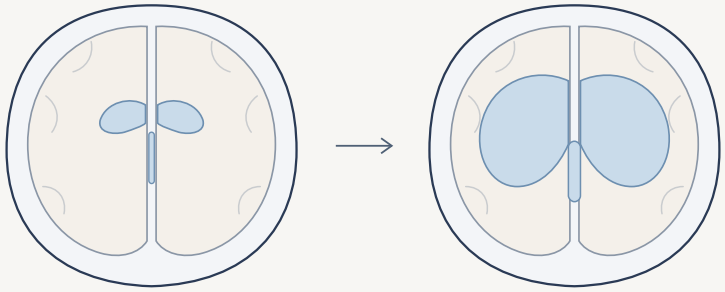
Nelson Mandela Children's Hospital
Private Suites, First Floor, 6 Jubilee Road, Parktown North

012 664 6026
HPCSA MP 0530077

01 General information

Hydrocephalus

Cerebrospinal fluid (CSF) is made inside the ventricles of the brain and normally flows out through narrow channels to the surface of the brain, where it is absorbed. If one of these channels is blocked, for example by a narrowing of the aqueduct or by a tumour or cyst, fluid builds up inside the ventricles and the pressure rises. This is called obstructive hydrocephalus.



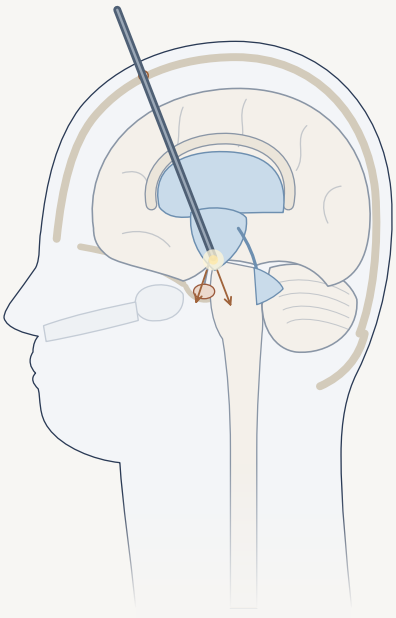
Left: ventricles of a normal size. Right: enlarged ventricles in hydrocephalus.

What is an ETV?

An ETV creates a new pathway for the fluid without implanting a device. Under a general anaesthetic, a small incision is made in the scalp, usually just behind the hairline, and a small hole is made in the skull. A thin endoscope (a telescope with a camera and light) is passed into the ventricle. A small opening is made in the thin floor of the third ventricle, allowing fluid to flow out into the natural spaces below the brain, where it can be absorbed.

In some infants, the surgeon may also use the endoscope to cauterise the choroid plexus, the tissue that produces most of the fluid. This combination, known as ETV-CPC, reduces fluid production and may improve the chance of avoiding a shunt in young babies.

The operation usually takes about an hour. If the anatomy seen through the endoscope makes an ETV unsafe, the surgeon may stop and insert a shunt or a temporary drain instead; this possibility will be discussed with you beforehand.



A fine endoscope passes through a small opening in the skull into the ventricle, and a small opening is made in the floor of the third ventricle so that fluid can bypass the blockage.

Will it work?

The chance of success depends mainly on your child's age and the cause of the hydrocephalus. It is generally higher in older children with a blockage of the aqueduct and lower in young babies and in hydrocephalus caused by bleeding or infection. Professor Labuschagne will explain your child's likely chance of success. An ETV can fail early, or occasionally months or years later, when the opening closes; a repeat ETV or a shunt may then be needed.

02 Alternatives to surgery

- **Ventriculoperitoneal shunt**, a tube system draining fluid to the abdomen. It works in most types of hydrocephalus but is an implanted device that may need future revision.
- **Temporary measures**, such as a ventricular reservoir or external drain, while a longer-term decision is made.
- **Treating the cause**, for example removing a tumour that is blocking the flow, sometimes with or after an ETV.
- **Observation**, only if the hydrocephalus is mild and stable.
- **No treatment.** Significant untreated hydrocephalus can cause loss of vision, developmental harm and can be life-threatening.

03 What to expect during and following surgery

Before the operation

- Please tell us about any allergies, bleeding tendencies, medicines (including herbal remedies) and any recent cough, cold, fever or vomiting.
- The anaesthetist will see you before surgery and give clear instructions about when your child must stop eating and drinking.
- Bring a favourite toy, blanket or dummy; familiar things help enormously.
- Where the hospital allows, one parent may accompany their child into the anaesthetic room until they are asleep.

In hospital after the operation

Your child wakes up in the recovery room and returns to the ward once settled. Some children spend the first night in a high-care or paediatric intensive care unit (PICU) for closer monitoring. Nurses will regularly check your child's level of alertness, pupils, breathing, heart rate, temperature and the wound, and may wake your child during the night to do this. This is routine and not a cause for worry.

- **Pain relief** is given regularly, first through the drip and then by mouth.
- **Eating and drinking** usually restart within hours, starting with small amounts.
- **Headache and vomiting** may occur in the first day or two as the fluid pathways adjust.
- **Scans.** An MRI may be done to check the flow of fluid through the new opening, either before discharge or at follow-up.
- **Going home.** Most children go home within one to three days.

04 Risks and complications

Every operation carries some risk. Most children recover well, but it is important that you understand what can go wrong so that you can make an informed decision and recognise problems early. The risks are listed according to how often they occur; Professor Labuschagne will also discuss any risks particular to your child. The risks of the anaesthetic will be explained separately by the paediatric anaesthetist.

Common

●●●

- Headache, vomiting and a mild fever in the first day or two.
- **Failure of the ETV**, needing a repeat procedure or a shunt. This is most likely in the first few months.

Less common

●●○

- Leakage of fluid from the wound, or a fluid collection under the scalp.
- Infection of the wound or meningitis.
- Temporary hormone or salt imbalance, affecting thirst and urine output.
- Temporary double vision, memory disturbance or confusion.
- Seizures (fits).

Rare but serious

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- Bleeding inside the ventricles, which may require a drain and can rarely be severe.
- Injury to an artery lying close to the floor of the third ventricle, which could cause a stroke or be life-threatening.
- Injury to deep brain structures, affecting hormones, memory, eye movements or consciousness.
- **Late sudden failure** of the ETV, even years later, which can cause rapid deterioration if not treated urgently.
- Serious complications of anaesthesia, or death. These are very rare.

> ### An ETV can fail years later
>
> Although many children never need further surgery, an ETV opening can close at any time. The warning signs are the same as for a blocked shunt, and they must never be ignored. Please keep this booklet and make sure everyone who cares for your child knows them.

05 After the operation: what is normal

- A small wound on the head, usually just behind the hairline.
- Mild headache and tiredness for a few days.
- A temporary low-grade fever is common in the first 48 hours.
- No device is left behind, so there is nothing to feel under the skin apart from the small hole in the bone.

06 Recovery

- **Wound.** Keep it clean and dry until checked. Dissolvable stitches do not need removal.
- **Activity.** Most children return to normal activities and school within one to two weeks.
- **Follow-up.** A review at about six weeks with a scan, and then long-term follow-up of head growth, development and vision.
- **Long term.** Your child should be followed up for many years, because late failure can occur.

07 When to contact the rooms

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

- Headache that is severe, persistent or worse in the morning
- Repeated vomiting, or vomiting with headache
- Unusual sleepiness, difficulty waking, marked irritability or poor feeding
- A tense, bulging fontanelle or a rapidly enlarging head
- Squint, double vision, eyes turned downwards or blurred vision
- A seizure (fit), new or more frequent than usual
- Fever, especially with any of the other signs
- Redness, swelling, tenderness or fluid along the shunt or wounds
- Loss of skills, a change in behaviour or a fall in school work

IN AN EMERGENCY

If your child is very drowsy, cannot be woken, is having a seizure that does not stop, or you are seriously worried, call an ambulance or go to the nearest emergency department immediately. Tell the staff about your child's operation and ask them to contact Professor Labuschagne. You know your child best: if something does not feel right, please call.

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.

For a child, consent is given by a parent or legal guardian. In terms of the Children's Act 38 of 2005 (section 129), a child aged 12 or older who is mature enough to understand the benefits, risks and implications of an operation may consent to it, provided that he or she is assisted by a parent or guardian. Younger children are encouraged to take part in the discussion and give their agreement where they can.

THE PROCEDURE

Procedure Endoscopic third ventriculostomy (± choroid plexus cauterisation) Side / site _____

Condition, in the parent's 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 child's 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 my child, 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 my child undergo the procedure described.

PARENT OR LEGAL GUARDIAN

Full name _____ Relationship to child _____

Signature _____ Date and time _____

CHILD'S AGREEMENT (WHERE APPROPRIATE)

I have been told about my operation, I have been able to ask questions, and I agree to have it.

Child's name _____ Age _____

Signature _____ Date _____

SURGEON'S STATEMENT

I have explained the child's condition, the need for treatment, the proposed procedure and its expected benefits, the material risks including those specific to this child, 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 parent or guardian.

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 parent or guardian. 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