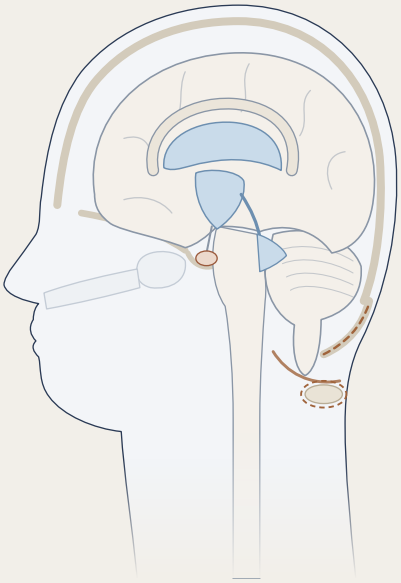
Professor Jason John Labuschagne
PAEDIATRIC AND ADULT NEUROSURGEON

PAEDIATRIC NEUROSURGERY

Chiari Malformation: Posterior Fossa Decompression

Information and consent for parents and guardians



This booklet explains Chiari malformation and the operation to make more room at the back of the head. It is written for parents, but much of it also applies to teenagers and adults. 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.

1	General information	2
2	Alternatives to surgery	2
3	What to expect during and following surgery	3
4	Risks and complications	3
5	After the operation: what is normal	4
6	Recovery	4
7	When to contact the rooms	5
8	Consent	6

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

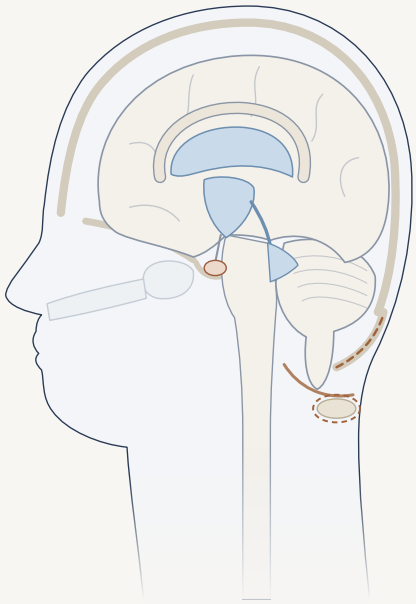
What is a Chiari malformation?

At the back of the skull, the lower part of the brain (the cerebellum) sits in a small space called the posterior fossa, just above the opening where the spinal cord leaves the skull. In a Chiari I malformation, the lowest parts of the cerebellum, called the tonsils, extend down through this opening into the top of the spinal canal. This can crowd the area and obstruct the normal flow of cerebrospinal fluid.

Many people with a Chiari malformation have no symptoms and need no treatment. Others develop headaches at the back of the head that are typically brought on by coughing, straining or laughing, neck pain, problems with balance or swallowing, numbness or weakness, or scoliosis. In some, a fluid-filled cavity called a syrinx forms within the spinal cord.

What does the operation involve?

The aim is to create more space and restore the flow of fluid. Under a general anaesthetic, with your child lying face down and the head held still, an incision is made in the middle of the back of the head and upper neck. A small area of bone at the base of the skull is removed and usually part of the back of the first neck bone. Depending on the findings and the monitoring of nerve function, the covering of the brain (dura) may be left intact, thinned, or opened and enlarged with a patch graft. The muscles and skin are then closed in layers.



The cerebellar tonsils extend below the skull opening. Decompression removes a small amount of bone (dashed lines) and may enlarge the covering of the brain with a patch.

02 Alternatives to surgery

- **Observation** with regular review and MRI, appropriate for many children with few or no symptoms.
- **Symptom treatment**, such as pain relief, physiotherapy and avoiding straining, which does not change the anatomy.
- **Different extents of decompression**, from bone removal alone to opening the dura with a patch, each balancing effectiveness against complications; Professor Labuschagne will explain his recommendation.
- **Treatment of associated problems**, such as hydrocephalus, before decompression where present.

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.
- **Neck pain and stiffness** are the main discomforts for the first few days and are treated with regular medication.
- **Mobilising** usually starts on the day after surgery.
- **Going home.** Most children go home after about three to five 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

- Neck pain, stiffness and headache for several weeks.
- Nausea and vomiting in the first few days.
- Persistence of some symptoms, particularly long-standing headache or numbness.

Less common

●●○

- **Leakage of spinal fluid** from the wound, or a fluid collection under the skin (pseudomeningocele), which may need further treatment.
- **Chemical (aseptic) meningitis**: headache, neck stiffness and fever without infection, usually settling with medication, more likely when a patch is used.
- Wound infection or bacterial meningitis.
- Hydrocephalus needing temporary or permanent treatment.
- Symptoms not improving or returning, needing further surgery.

Rare but serious

●○○

- Bleeding at the operation site.
- Injury to the brainstem, cerebellum or spinal cord, causing weakness, balance, swallowing or breathing problems.
- Injury to a large vein or artery at the base of the skull, or stroke.
- Serious complications of anaesthesia, or death. These are very rare.

05 After the operation: what is normal

- Neck and shoulder stiffness that improves over two to six weeks.
- Headaches that are different in character from before and gradually settle.
- Tiredness for several weeks.
- Numbness around the scar.

06 Recovery

- **Wound.** Keep it clean and dry until checked; stitches are usually dissolvable.
- **Activity.** Return to school after two to four weeks. Avoid heavy lifting, contact sports and activities that strain the neck for about three months.
- **Follow-up.** In the rooms at about six weeks; an MRI is usually done some months after surgery, particularly if a syrinx was present.

07 When to contact the rooms

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

- Severe or worsening headache, especially with neck stiffness
- Fever
- Clear fluid leaking from the wound or a growing swelling behind it
- Repeated vomiting
- Unusual drowsiness or confusion
- Difficulty swallowing or breathing
- New weakness, numbness or unsteadiness
- Double vision

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 Posterior fossa (foramen magnum) decompression ± duraplasty 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