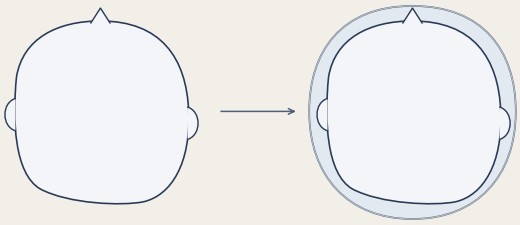
Professor Jason John Labuschagne
PAEDIATRIC AND ADULT NEUROSURGEON

PAEDIATRIC NEUROSURGERY

Positional Plagiocephaly and Helmet Therapy

Information for parents and guardians



This leaflet explains positional head flattening, why surgery is almost never needed, and how helmet (cranial orthosis) therapy may help selected babies. Professor Labuschagne works with a network of experienced orthotists who assess and treat babies with helmet therapy.

1	General information	2
2	Alternatives to helmet therapy	2
3	What to expect during helmet treatment	2
4	Risks and side effects	3
5	Wearing the helmet: what is normal	3
6	Duration and outcome	3
7	When to contact us	4
8	Agreement to treatment	5

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

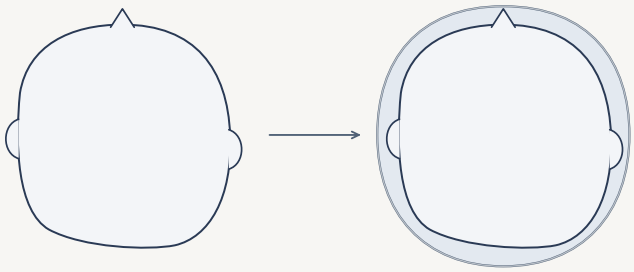
What is positional plagiocephaly?

A baby's skull is soft and grows rapidly in the first year. If a baby spends a lot of time lying with the head in the same position, the back or one side of the head can become flattened. On one side this often pushes the ear and forehead forward on that side, giving the head a parallelogram shape when seen from above. Flattening across the whole back of the head is called brachycephaly. It has become more common since babies were advised to sleep on their backs, which remains the safest way for them to sleep.

Positional flattening is a cosmetic condition. It does not affect the brain or development, and it is different from craniosynostosis, in which a skull suture fuses early. Professor Labuschagne will examine your baby to make sure there is no synostosis; a scan is rarely needed. A tight neck muscle (torticollis) is a common contributing factor and responds well to physiotherapy.

How does a helmet work?

A cranial orthosis is a lightweight, custom-made helmet with a soft lining. It does not squeeze the head. It rests on the prominent areas and leaves a small space over the flattened areas, so that as the head grows, growth is guided into those areas. Because it relies on growth, it works best between about four and twelve months of age and is usually started between four and six months.



Left: flattening at the back of one side, seen from above. Right: a custom helmet holds the head lightly, leaving room for growth into the flattened area.

02 Alternatives to helmet therapy

- **Repositioning and tummy time.** For most babies, especially under four to six months, changing the head position during sleep, plenty of supervised tummy time when awake, and varying how the baby is held and fed produce good improvement.
- **Physiotherapy**, particularly when there is a tight neck muscle or a strong head-turning preference.
- **Observation.** Mild to moderate flattening often improves considerably as the baby sits up and the head grows, although some asymmetry may remain.
- **Surgery** is almost never needed for positional flattening.

03 What to expect during helmet treatment

- **Assessment.** The orthotist measures the head, often with a 3D scan, and discusses whether a helmet is likely to help.

- **Fitting.** About one to two weeks later the helmet is fitted and you are shown how to put it on, remove it and clean it.
- **Wearing time.** The helmet is built up over a few days to about 23 hours a day, removed only for bathing and cleaning.
- **Adjustments.** Regular visits with the orthotist, often every two to four weeks, to adjust the helmet as the head grows.
- **Review** with Professor Labuschagne as needed, particularly if progress is slower than expected.

04 Risks and side effects

Common

●●●

- Sweating and a heat rash under the helmet, especially in hot weather.
- Mild redness of the skin where the helmet presses, which should fade within an hour of removing it.
- An odour from the helmet if it is not cleaned daily.

Less common

●●○

- Persistent pressure marks or skin breakdown, needing adjustment.
- Difficulty settling or sleeping in the first few days.
- An incomplete improvement of head shape.

Rare but serious

●○○

- Skin infection under the helmet.
- An undetected craniosynostosis, which is why an expert examination is important before treatment.

05 Wearing the helmet: what is normal

- It usually takes a few days for a baby to get used to the helmet.
- Most babies sleep, feed and play normally while wearing it.
- Daily cleaning of the helmet and washing of your baby’s hair keeps the skin healthy.

06 Duration and outcome

- Treatment usually lasts about three to six months, depending on the age at which it starts and the severity.
- Improvement is gradual and continues after the helmet is removed as the head grows.
- Most babies achieve a good improvement, although a perfectly symmetrical head is not guaranteed.
- The costs of a helmet may not be fully covered by medical schemes; the orthotist will provide a quotation.

07 When to contact us

Please contact the orthotist or the rooms if you notice any of the following:

- Redness that lasts more than an hour after removing the helmet
- Broken skin, blisters or sores under the helmet
- A rash that does not settle
- The helmet seems too tight or no longer fits well
- Fever with redness or swelling of the scalp
- Your baby remains very unsettled after the first week

IN AN EMERGENCY

Helmet therapy itself does not cause emergencies. If your baby is unwell, very drowsy, vomiting repeatedly or has a seizure, remove the helmet and seek urgent medical care as you normally would.

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 Agreement to treatment

Helmet therapy is a non-surgical treatment. By signing below, you confirm that you have received and understood the information in this leaflet and wish to proceed with an orthotic assessment and, if recommended, helmet therapy.

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 leaflet and understand that positional plagiocephaly is a cosmetic condition that does not affect brain development.
- ☐ The alternatives, including repositioning, tummy time, physiotherapy and observation, have been explained.
- ☐ I understand that the helmet needs to be worn for most of the day for several months and that regular orthotist visits are required.
- ☐ I understand that a perfect head shape cannot be guaranteed.
- ☐ I understand that helmet costs may not be covered in full by my medical scheme.
- ☐ I agree to a referral to an orthotist for assessment and, if appropriate, helmet therapy.

PARENT OR LEGAL GUARDIAN

Full name _____ Relationship to child _____

Signature _____ Date and time _____

SURGEON'S STATEMENT

I have examined the child, excluded craniosynostosis on clinical grounds, and explained positional plagiocephaly, the alternatives and the role, benefits and limitations of helmet therapy.

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