

Helmeting



Post-surgical helmeting is a critical part of **endoscopic craniosynostosis repair**. Your baby's custom-fitted helmet protects his or her head and also helps shape it. Post-surgical helmeting is just as important as the endoscopic repair procedure. Parents and guardians will need to supply their time, as well as be compliant and communicative with their orthotist, in order for helmeting therapy to be successful.



1-year-old after completion of helmet molding therapy and endoscopic-assisted treatment for right coronal synostosis.

Endoscopic Repair & Helmeting FAQ

How many hours each day does my child need to wear the helmet? Can he/she take it off?

We recommend that the helmet be worn 23 hours a day. They helmet may be removed for cleaning and bathing, but otherwise should be kept on.

How often will my child have to be seen to have the helmet adjusted?

In the beginning it may be as often as every 1-2 weeks. By the end of helmet treatment, it can be spaced out to about once a month.

How long will my child have to wear a helmet after surgery?

Until they turn one year old.

How long after surgery will it be before my child gets his/her helmet?

If you live in St.Louis or the surrounding area your child will be fit with his/her helmet the morning after surgery. If you are not in the St.Louis area it is usually a day or two after surgery before your child gets the helmet. This allows for travel time to get home and to get in with your local orthotics provider.

I don't live in the St.Louis area. Will I need to travel to St.Louis for helmet treatment?

No. We work with a national orthotics company to find the closest cranial orthotists to your home. So all of your child's helmet visits will be closer to your home.

How do infants adjust to the helmet?

Infants are very resilient to change and adjust to the helmet in a couple of days. It does not hurt them or cause headaches. It will also not delay their growth and development.

How many helmets will my child need?

Most children end up needing between 2 and 4 helmets.

Open Repair FAQ

Is there any kind of pre-testing that my child needs to have before surgery?

Typically there is no pre-testing required. If your child has other health conditions additional testing will be considered on a case-by-case basis.

Will my child need to be admitted to the hospital the day before surgery?

No. Your child will come in the morning of the surgery.

How long will my child have to go without eating before surgery?

Your child will not be able to eat (NPO) for several hours before surgery. You will receive a call the day before surgery with the specific times at which your child will no longer be able to eat or drink. These times are based on the start time of your child's surgery.

Can my child get vaccinations before surgery?

Yes. Your child should receive their routine vaccines at the regular times before and after surgery

When will my child be able to eat or drink after surgery?

Clear liquids are given to the child shortly after surgery. If the child tolerates clear liquids they will then be moved on to breast milk or formula.

My baby is breastfed. Will I be able to breastfeed after surgery?

Yes. You may breastfeed as soon as your child is awake after surgery. There are also breast pumps & lactation rooms at the hospital if you need to use them.

Will there be any dressings or bandages to change after surgery?

No. There will not be any bandages or dressing to change. The incision will have stitches that dissolve. Vaseline will need to be applied to the incision.

Will my child be sent home with pain medicine?

Yes. Your child will be sent home with liquid pain medicine. This can be filled in the outpatient pharmacy before you leave the hospital.

Unicoronal Craniosynostosis



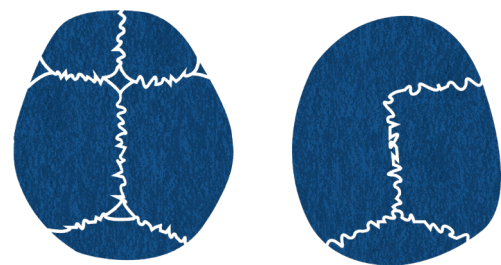
A guide for parents and caregivers



What is Craniosynostosis?

At birth, a child’s skull is made of separate bones with growth plates called ‘sutures’ between them. These joints allow the skull to grow. Over time, the sutures close and the bones fuse. Craniosynostosis occurs when bones in a child’s skull fuse prematurely.

Normal Skull of Newborn Superior View Uniconoral Craniosynostosis Superior View



What is uniconoral craniosynostosis?

Uniconoral craniosynostosis refers to the premature closing of the suture that runs at the top of the head, from ear to top of the forehead. Uniconoral synostosis causes forehead and brow flattening on the affected side. On the opposite side, the forehead tends to be excessively prominent. The eye on the affected side may also have a different shape.

How is craniosynostosis treated?

Craniosynostosis can be treated with **Open Repair** or **Endoscopic Repair**. Both surgeries produce normal head shapes and involve a plastic surgeon and a neurosurgeon. The Open Repair, or cranial vault remodeling, involves removing and reshaping skull bones, then securing them with dissolving plates and screws. The minimally-invasive Endoscopic Repair uses a small camera to remove sutures through one-inch incisions. Patients must then wear a helmet until one year of age to guide normal skull growth. **Both repairs have equal physical outcomes, equal complication rates and are similar regarding post-surgery pre-cautions. The endoscopic repair however, provides better facial symmetry and the need for eye surgery is less in comparison to open repair.**

Open Repair

The open surgery involves reconstructing the skull bones into a more typical shape.

Endoscopic Repair

The endoscopic surgery uses a small camera to assist with removal of the fused suture through one or two one-inch incisions.

Overview

Hospital stay	2-3 days, including 1 night in the ICU	Discharge home the day after surgery, typically no ICU stay
Surgery Details	3 hour surgery	30-90 minute surgery

Factors

Blood Loss	Most children will end up needing a blood transfusion.	Almost all children do not; however, about 5% will end up needing a blood transfusion.
Pain for infant	There is typically more pain, but each child is different.	There is typically less pain, but each child is different.
Scarring	Large, zig-zagged from ear to ear across the top of head	Smaller scar, 1-2 one inch incisions. (Varies by suture location)

Post Operation

Follow Up	One visit with the surgeon at three weeks post-op, and then again at 1 year post-op	Continued appointments with orthotist (helmeting clinician) until 1 year old.
Helmet	No Helmet needed	Yes. Worn 23 hours a day until 1st birthday

Please circle the issues that are most important for you and your child.

* pain is subjective and different for each child

	Hospital stay	Surgery Duration	Blood Loss	Pain	Scarring	Follow Up	Helmeting
Open	longer	longer	more	more*	more	less	no
Endo	shorter	shorter	less	less*	less	more	yes

After discussing this together, we want to do:

☐ endoscopic repair ☐ open repair ☐ take some more time to decide

Next step:

Schedule follow up with your physician or surgery

Craniosynostosis Timeline For Care

