

Craniosynostosis and Head Shape

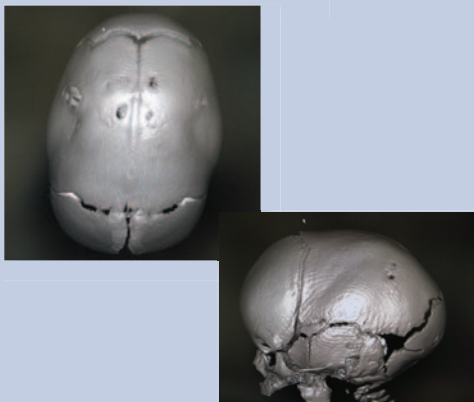
CASE STUDY: Samuel, 15 months

Overview: Samuel was born with a dolichocephaly (head shaped like a boat) and was referred to Children's Hospital to be evaluated for possible craniosynostosis. Examination and a CT scan with 3D reconstruction diagnosed sagittal synostosis.

Treatment: Because Samuel was referred soon after birth, he was a candidate for minimally invasive endoscopically assisted surgical correction. Two small incisions were made in his scalp, and swelling was minimal. Samuel was discharged post-op after three days. He wore a helmet for four months as adjunctive treatment.

Outcome: Samuel has a normally shaped head.

Testimonial: Samuel's mother says, "His head shape is perfect now!"



We have the largest craniosynostosis program in the region.

The American Academy of Pediatrics' "Back to Sleep" campaign, initiated in the early 1990s, reduced the number of patients suffering from SIDS by over half. However, the program brought an increase in plagiocephaly, or misshapen heads in infants. The Children's Hospital neurosurgery program offers a screening and education clinic for parents. Clinic staff are able to evaluate patients without a need for imaging. Those with severe deformities are treated with helmets by experienced helmet orthotists. The helmets are fitted and adjusted on site at Children's Hospital, saving parents multiple visits.

When head shape deformities are caused by craniosynostosis and surgery is needed, our center offers the most experienced surgical team in the region in minimally invasive endoscopically assisted techniques that leave only two one-inch incisions.

PROCEDURES FOR TREATING CRANIOSYNOSTOSIS

Infants diagnosed before the age of three months may be candidates for a minimally invasive, endoscopically assisted procedure. The advantages of the procedure are less blood loss, less swelling, and a shorter hospital stay. Patients will require helmet therapy for up to six months.

For patients not receiving the minimally invasive procedure, an open craniotomy is performed, and the bones of the skull are removed and reattached using plates and screws in a more normal shape. Patients who undergo this procedure usually require a blood transfusion and a hospital stay of 4 to 7 days.

INPATIENT CRANIOSYNOSTOSIS CASES, 2008-09

Children's treated over 39% of all of northern California's pediatric inpatient craniosynostosis cases in 2008-09.

Primary & Secondary Service Areas (Alameda, Contra Costa, Marin, San Joaquin, Santa Clara, Solano, Sonoma, Stanislaus); Ages 0-17; ©2010 Children's Hospital & Research Center Oakland

