Understanding Coronal Synostosis



What is coronal synostosis?

The cranial sutures are thread-like tissue in the skull where the bones connect. They hold a baby's skull bones together. Coronal synostosis is when one or both coronal sutures close too early. This can change the shape of the head and face.

What is unilateral coronal synostosis?

One side is fused. A fused side can make the forehead and face look uneven. The eyes, nose, and chin may look shifted to one side. Surgery helps correct this, and the face improves over time.

What is bilateral coronal synostosis?

Both sides are fused. When this happens, the forehead looks wide and flat. This may be due to a genetic condition, so more testing may be needed. Our clinic specializes in these cases and will help care for your child.

Why is surgery necessary?

- Allow normal brain and skull growth.
- Fix the shape of the head and face.
- Reduce the risk of problems like developmental delays and vision issues.

Treatment Options

What is Fronto-Orbital Advancement (FOA) with Calvarial Vault Remodeling (CVR)?

A surgery where the doctor makes a zigzag cut across the scalp, from ear to ear. This limits visible scars. The doctor removes, reshapes, and replaces the fused sutures and nearby skull bones. The bones are held in place by tiny plates and screws. They dissolve in 6 to 12 months.

- When it's done: 7 to 10 months for ideal skull flexibility and brain growth.
- Length of surgery: 4 to 6 hours under general anesthesia.
- **Blood transfusio**n: Your baby will get a blood transfusion. We can help you arrange to have "direct donor" blood used for your baby's transfusion.
- Length of hospital stay: 3 to 5 days. Usually one night in the pediatric intensive care unit.
- **Pain after surgery:** Your child will get pain medicine as needed while in the hospital. If needed, your baby will go home with over-the-counter pain meds.
- **Helmet therapy**: In general, it starts about 2 to 3 weeks after surgery. Once the swelling from surgery has gone down.
- **Follow-up:** We recommend regular follow-ups at our clinic for the first year after surgery. Then it will be once a year until about age 6.

Meet Your Craniosynostosis Care Team

Our team is here to provide expert care and support for your child and family. From diagnosis to recovery, we're with you every step of the way.

Mark Urata, MD, DDS, DMD Craniofacial Plastic Surgeon

Specializes in pediatric craniofacial surgery. Works with other specialists for the best results.

Susan Durham, MS, MS Pediatric Neurosurgeon

Specializes in pediatric neurosurgery. Partners with the craniofacial surgeon during surgery. Focuses on the child's continued brain development as they grow.

Yvonne Guitterez, MD Craniofacial Pediatrician

Specializes in your child's general medical health and unique needs. Ensures your child is healthy enough for surgery.

Alexia Johns, PhD Developmental Specialist

Checks your child's growth before and after surgery. Monitors their physical, mental, and social development.

Lance Siegel, MD Pediatric Ophthalmologist

Checks your child's visual development and keeps it on track as they grow.

Our care providers will coordinate your child's care from diagnosis onward. We will do this by educating, referring, and managing care.

Karla Haines, NP (Plastic Surgery)
Sally Dantos, NP (Plastic Surgery)
Shannah Young, NP (Plastic Surgery)

Erin Lowerhouse, NP (Plastic Surgery) Alex Loakes, PA (Neurosurgery

Contact Information

Plastic Surgery Clinic Phone: (323) 361-2154
 Clinic Phone: (323) 361-2154

• Neurosurgery Clinic Phone: (323) 361-2169

After-Hours Emergency Line: Call the hospital operator at (323) 660-2450. Ask to speak to the plastic surgery or neurosurgery resident on call.

