A 3-month-old, full-term, otherwise healthy female infant presented for evaluation of flattening of one side of the forehead and partial closure of one eye. Based on her appearance, the pediatrician suspected deformational plagiocephaly but considered the possibility of craniosynostosis. The former is managed by decreasing time spent on the flattened surface of the skull or using an orthotic helmet to reshape the skull. Craniosynostosis, the premature fusion of 1 or more cranial sutures, nearly always requires surgical intervention to normalize the cranium and provide sufficient room for the brain to grow.

On physical examination, she manifested certain classic external stigmata (Figure, A). In particular, her nasal bridge deviated toward the flattened forehead (side of prematurely fused coronal suture) and the tip of her nose and chin deviated away from the side of the unicoronal synostosis. In addition, the ear on the side with unicoronal synostosis was anterior and inferior to the contralateral ear. Computed tomography (CT) imaging confirmed unicoronal synostosis, with orbital rim elevation and retraction on the side with a fused coronal suture, and contralateral frontal bossing (Figure, B). Frontal bossing is responsible for the diminished interpalpebral fissure seen on the contralateral side (Figure, A). Endoscopic strip craniectomy (ESC) followed by molding orthosis was performed, with a successful outcome.

Unicoronal synostosis may result in astigmatism, amblyopia, and strabismus. Other types of craniosynostosis also may result in elevated intracranial pressure, sleep apnea, and optic atrophy. Although skull deformation secondary to untreated unicoronal synostosis and other forms of craniosynostosis worsens over the first year of life, skull aberrancy from deformational plagiocephaly often diminishes over time even without treatment. Pediatricians less familiar with the specific stigmata of unicoronal synostosis may monitor a child looking for improvement vs worsening of the skull deformation and delay referral. If unicoronal synostosis is suspected and the infant is referred within the first 3-4 months, minimally invasive ESC followed by helmeting can be performed. Later referral restricts surgical management to fronto-orbital advancement. ESC and helmeting are associated with better ophthalmic outcomes, including less severe strabismus and astigmatism. In addition, ESC is associated with reduced operative time, reduced blood loss and less need for coagulation and blood products, and shorter hospitalization compared with fronto-orbital advancement.

**Figure.** A, External photo and B, cranial CT from a nearly 4-month-old girl before surgical correction of left unicoronal synostosis (blue star). There is ipsilateral retraction of the forehead and elevation of the superior orbital rim with secondary widening of the interpalpebral fissure (white star). She also has an anterior and inferior position of the ipsilateral ear (pink star). The contralateral side developed compensatory bossing of the forehead and narrowing of the palpebral fissure (black star). The tip of the nose and the chin (white arrow) point to the contralateral side.

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