

Neonatal skull depression

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CASE REPORT

A preterm (36weeks) male infant weighing 2,660 g was delivered by uncomplicated cesarean section, to a healthy 33 years-old primigravida. The pregnancy had been normal. Prenatal sonography is reported with oligohydramnios, this was the cause of C-section. The baby was delivered in good condition (Apgar scores 9 and 9 at one and five minutes). A left parietal skull depression was noted clinically. Both neurologic and physical examination was normal. There was no edema or hematoma in the area of the skull abnormality. The skull radiographs performed and showed the left parietal depression. Computed tomography with three dimensional reconstruction images revealed a 1.1 cm depression in the left parietal bone (Figures 1 and 2).

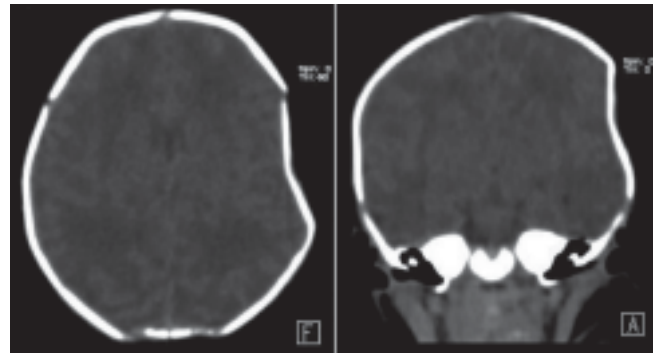


Figure 1. Axial computed tomography brain scan. Axial (A) and coronal section (B). It shows a depression in the left parietal region. The sinking depth is about 1.1 x 4.0 cm in extension, with no associated fracture.

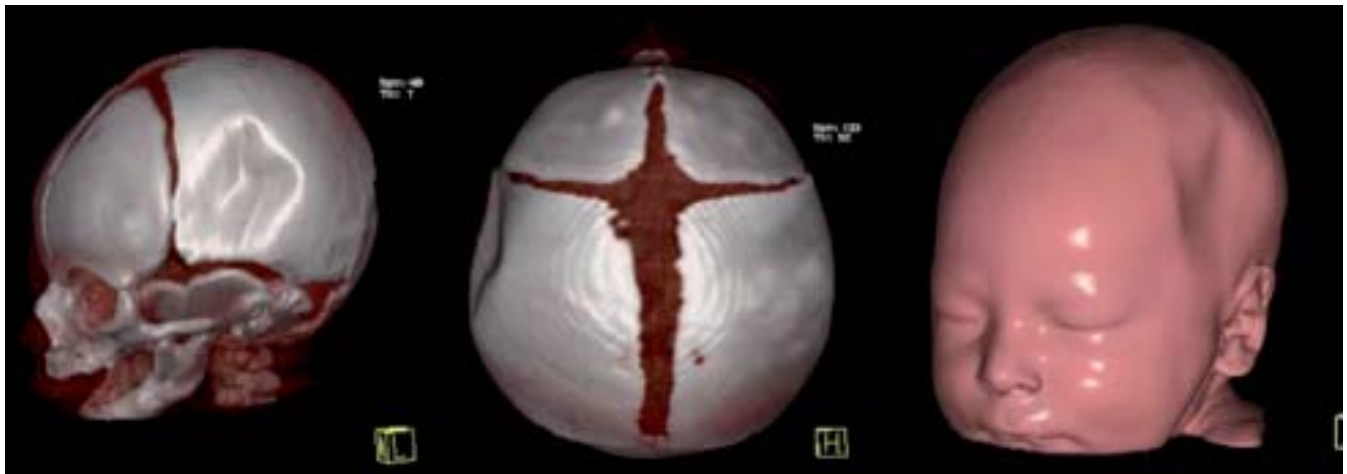


Figure 2. Three dimensional reconstruction images. The depression is located in left parietal region.

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There was no evidence of fracture, and the intracranial structures were normal. It was considered severe case by the depth of the depression, so surgical elevation was performed by trepano. On review at the first month of age, the depression had completely resolved. The baby remains neurologically intact and is thriving.

Depression of the skull is a rare event and the cause is not always clear. It may be complicated by brain injury, hematoma, and epilepsy.¹ The incidence of about 1/10,000 in western countries.² It could occur either as a birth trauma and in postnatal blunt traumas, in the first one usually, results from the pressure caused by mother's pelvic bones against the soft skull during labor. Treatments have included surgical elevation,^{3,4} elevation by digital pressure on the edges of the depression,^{3,4} elevation by vacuum extractor or a breast pump,^{3,4} and watchful waiting.⁵ It has been demonstrated previously that the natural

history of these depressed skull fractures is variable, with some elevating spontaneously over time and others remaining depressed.⁴

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