

Case Report: Conservative Approach in the Management of Congenital Skull Depression

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His other investigations, including, Full blood count was normal. TORCH profile and Urine CMV were negative.

Case Presentation

A male baby was born to a gravida 3 para 2 mother at 35 weeks of gestation by normal vaginal delivery. Antenatally there was suspicion of intrauterine growth restriction at 31 weeks, and on follow up at 35 weeks, there was IUGR corresponding to 27 weeks of gestation. The baby was born with good APGAR scores of 9 and 10 at 1 minute and 5 minutes, respectively. The liquor and Doppler study were normal. His weight at birth was 1.56 kg, (below the 3rd centile). Head circumference was 30 cm (below 10th centile), length 43.5 cm below 10th centile.

On examination, the baby's vitals were stable. He maintained his oxygen saturations well in room air. He had a depression of the skull on the right parietal area 5 cm x 3 cm (Figure 1). The rest of the systemic examination was normal. CT scan was done, which revealed a depression of the right parietal bone. The neurosurgeon reviewed the baby. Skull fracture and intracranial pathology were ruled out, and this was diagnosed as a skull depression most probably due to intrauterine position. On the advice of the neurosurgeon, the baby was managed conservatively.

Discussion

Physical examination of the newborn baby revealed a depression in the right parietal region 5 cm x 3 cm. The baby was active. CT scan (figure 4) revealed a depression of the right parietal bone with no evidence of fracture. After evaluation by

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The baby was discharged and followed in the neonatal clinic. The baby was seen in the clinic at the age of 2 months. The skull depression had completely resolved (Figure 2 and 3). He is active, recognizing mother, fixing and following objects well, has partial head control, and no neurological deficits.



Figure 1: At Birth

Figure 2 and 3: at 2 months of age

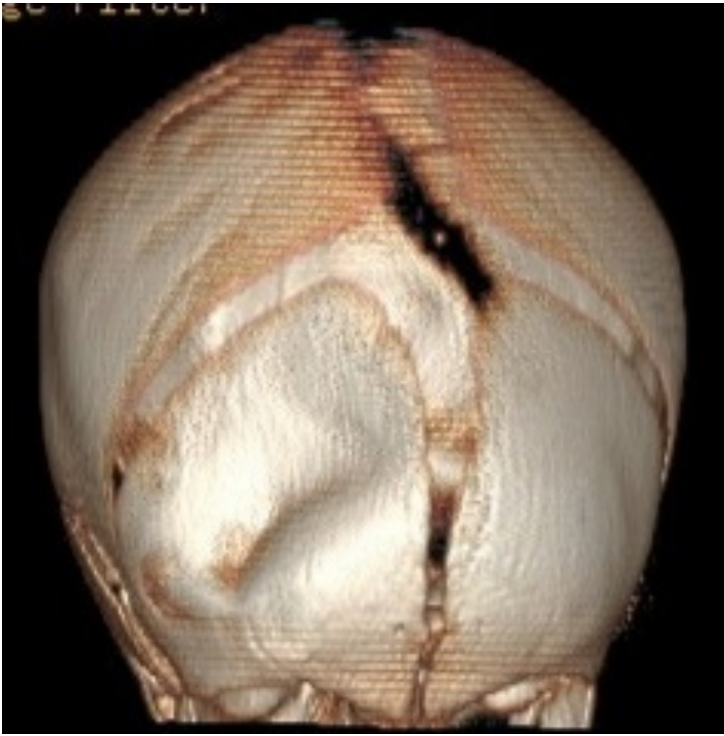


Figure 4: CT demonstrating skull depression

the neurosurgeon, the baby was managed conservatively and discharged.

“Depression of the skull in newborn babies is rare, occurring with an incidence of 1 in 10,000 live births. (1) The cause of the depression is usually unknown, but may be due to the pressure of the baby’s limbs or the pressure from the maternal pelvic bones at the time of the delivery.(2)”

Depression of the skull in newborn babies is rare, occurring with an incidence of 1 in 10,000 live births. 1 The cause of the depression is usually unknown, but may be due to the pressure of the baby’s limbs or the pressure from the maternal pelvic bones at the time of the delivery. (2) Neonatal skull depressions can occur with or without fractures. (3) CT scan of the head helps reveal fractures, underlying haematomas, and cortical

compression. (3) Skull fractures are usually linear, affecting the parietal bones, or depressed, forming the so-called ping-pong ball-type fracture. Linear fractures usually do not require any intervention. (4) Nonsurgical techniques, such as digital pressure, a breast pump, and an obstetric vacuum extractor have been utilized if there are no neurological deficits. Neurosurgical intervention may be required if there are fragments of bone in the cerebrum, or there are any neuro deficits. 4 Most of the uncomplicated skull bone depressions in newborn babies resolve spontaneously, with conservative management, over a period of 6 months. (3)

“On follow up of our patient in the clinic at two months of age, examination showed complete resolution of the depressed part of the bone, and the baby is thriving well with normal developmental milestones.”

On follow up of our patient in the clinic at two months of age, examination showed complete resolution of the depressed part of the bone, and the baby is thriving well with normal developmental milestones.

References:

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Consent from parents: Taken for publishing case material and photographs.

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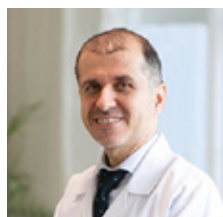
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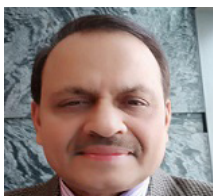
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