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## LETTER TO EDITOR (VIEWERS CHOICE)

### PLACENTAL ADHESION ON AN ANENCEPHALIC HEAD OF A NEWBORN

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A preterm female baby was born vaginally as a second twin to a 24 year old third gravida mother. The first twin was male, with birth weight 1.10 kg. Combined weight of second twin with placenta was 1.35 kg. Both cried immediately after birth and were shifted to nursery. Mother had infrequent antenatal check-ups and an unremarkable medical history with non-consanguineous marriage. There was no history of any specific drug intake in the mother, or family history of neural tube defects. Last ultrasound done at 22 weeks of gestation had suggested partial exencephaly in one twin. She had gone into premature labour at 28 weeks of gestation after which she delivered twins. On examination, second twin baby was anencephalic with placenta firmly adhered to the deficient cranial margins (Figure 1). Cord length was only 24 cm. Placenta was normal with no missing part or cotyledon. Apart from anencephaly, baby had saddle nose, low set ears, bilateral cleft lip and palate, and bilateral congenital talipes equinovarus. Baby's reflexes were poor and tone was decreased. All the other systems and spine were normal. Baby was hemodynamically stable, and given supportive care. Hemogram, serum electrolytes, blood sugar were normal. X ray chest and ultrasound abdomen were normal. She develop clinical sepsis on 3rd day and intravenous antibiotics were started. She had apnea and expired on fifth day of life. After death, an autopsy was planned, but was refused by the parents. First twin had no congenital anomaly. However, he also expired due to severe respiratory distress syndrome and sepsis.

**Figure 1: Anencephaly with adherent placenta**



Anencephaly is a neural tube defect in which there is congenital absence of major portion of brain, skull and scalp. The primary abnormality is failure of cranial neurulation, which is the embryologic process separating the precursors of forebrain from the amniotic fluid, leading to exposed cranial tissues. Because of variation in the embryologic process, anencephaly takes on various appearance. (1) It is on the severe end of the spectrum of open neural tube defects, and is invariably lethal before or after birth. (2) Anencephaly can be subdivided into those cases mainly affecting the rostral brain and skull (meroacrania) and those also affecting posterior brain and skull (holoacrania). (3) Placental adhesion along

deficient cranial margins of anencephaly have rarely reported previously in which one baby was full term with long umbilical cord, while other had amniotic band sequence. (4,5) However our case had unusually short umbilical cord, apart from being one of the twins. Other associated craniofacial anomalies with anencephaly are diprosopus, flattened nasal bridge, low set ears, cleft palate, corneal clouding, microcornea, exophthalmos of which many features were seen in our case too. Patients may also have cardiac and lung anomalies, abdominal wall defects, gut and renal anomalies. Skeletal defects are also common. (1)

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**References :**

1. Stumpf DA, Cranford RE, Elias S, Fost NC, McQuillen MP, Myer EC et al. The infant with anencephaly. *N Engl J Med.* 1990; 322:669-74.
2. Copp AJ, Greene NDE. Neural tube defects - disorders of neurulation and related embryonic processes. *WIREs DevBiol.* 2013; 2:213-227.

3. Seller MJ. Sex, neural tube defects, and multisite closure of the human neural tube. *Am J Med Genet.* 1995; 58:332-336.
4. Sasidharan CK, Anoop P. Anencephaly with placental attachment. *Indian J Pediatr.* 2002;69:991-992
5. Merrimen JL, McNeely PD, Bendor-Samuel RL, Schmidt MH, Fraser RB. Congenital placental-cerebral adhesion: an unusual case of amniotic band sequence. *J Neurosurg.* 2006; 104(5 Suppl):352-355.

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