

Diprosopus twin

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Sri Lanka Journal of Child Health, 2016; 45(3): 231-232

DOI: <http://dx.doi.org/10.4038/sljch.v45i3.8002>

(Key words: Diprosopus twin)

Case report

A female baby of a consanguineous parentage, was delivered at 32 weeks with a birth weight of 1.4 kg. Examination showed that the baby had two fused faces with two mouths, two noses, two lateral completely formed eyes and two medially fused eyes



Figure 1: *Diprosopus twin showing joined faces with single torso, a pair of upper limbs and a pair of lower limbs* (Signed informed consent obtained from parent to publish picture)

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(Received on 07 August 2015; Accepted after revision on 18 September 2015)

The authors declare that there are no conflicts of interest

Personal funding was used for this project.

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without any eyelids, but having one body and two pairs of limbs (Figure 1). Baby died 5 minutes after birth and was diagnosed as diprosopus twinning.

Discussion

Diprosopus, also known as craniofacial duplication, is the rarest form of conjoined twins, with prevalence of 1 in 15,000,000 births¹. The baby is born with a single torso and normal limbs but the facial features are duplicated to varying degrees². Most babies are delivered stillborn. There are fewer than 50 cases documented since 1864¹. Although classically considered conjoined twinning (which it resembles), this anomaly is not normally due to the fusion or incomplete separation of two embryos. It is the result of abnormal activity by the protein sonic hedgehog (SHH)³. SHH is responsible for signalling and craniofacial patterning during embryonic development. Where the protein is found in excess, a baby will have wider facial features, and in extreme cases it can cause the duplication of those features.

Diprosopus can be detected antenatally by ultrasound examination for which the first indication is polyhydramnios⁴. It often occurs in combination with other congenital disorders, particularly anencephaly, neural tube defect and cardiac malformations⁵. When present, the brain may show abnormalities ranging from partial to complete duplication of brain structures, and under development of brain tissues. The condition is a rarity and currently no treatment to cure the condition is known.

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