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CEPHALOPAGUS CONJOINT TWINS- A RARE DEVELOPMENTAL ANOMALY

Radiodiagnosis

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ABSTRACT

Conjoint twins are one of the rare anomaly with high morbidity and mortality. These are monochorionic and monoamniotic type of gestation. Based on the site of fusion these can be of various types with thoracopagus being the most common .We are reporting a case of 19 weeks pregnant G2P1L1 patient who was reffered to our department for anomaly scan with outside ultrasound showing gross anomaly in fetus and in our department was diagnosed with cephalopagus conjoint twins . As conjoint twins carry high associated risks early diagnosis and management becomes necessary.

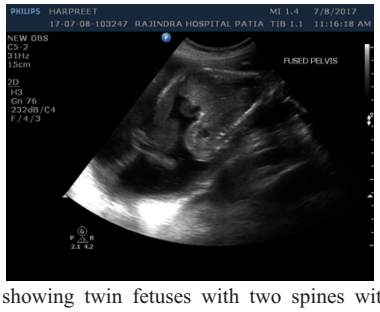
KEYWORDS

INTRODUCTION-

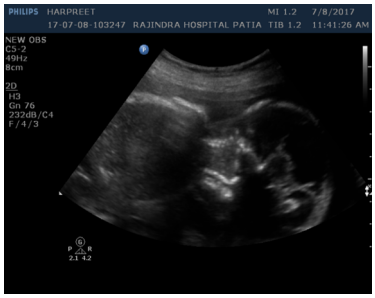
conjoint twins are rare developmental anomaly with high associated malformations and increased risk of morbidity and mortality so their early diagnosis and management becomes very important. They occur in roughly 1 in every 200 identical twin pregnancies and are always identical. The incidence ranges from 1 in 50 000 to 1 in 100 000 live births.[1]

Case report-

- A multigravida female was reffered to our radiology department for usg at 19 weeks of gestation with previous outside usg showing gross abnormality.
- She had 1 previous child with no family history of twins .
- On usg two fetuses with two spines,two hearts, four upper limbs ,four lower limbs however single large skull and single face were seen with the fusion of the thoracic and abdominal wall till the level of umbilicus.
- Single umbilical cord with two vessels was seen.
- Single placenta was seen along the right lateral wall.
- A multiloculated cystic swelling was noted along the neck of the fetus suggestive of cystic hygroma. The skin was thickened and odematous.
- The patient was sent back to the gynae department for further management where she was explained about the adverse outcomes of the gestation and was advised MTP. She was induced after taking proper consent and delievered still born cephalopagus conjoint.



Usg image showing twin fetuses with two spines with fusion of thoracic and abdominal wall upto the level of umblicus.



Two spines with fusion along the thoracic wall and a single head.

Two hearts were seen with this twin gestation

Multiloculated cystic swelling was seen around the neck.

Post MTP Still born Cephalopagus Conjoint Twins

DISCUSSION-

Conjoint twins are rare developmental anomaly. They share single placenta,chorion and amnion and thus are monochorionic and monoamniotic type of placentation.

The cause of conjoined twins is unknown. Two theories have been postulated to explain the origin of this phenomenon:

1. Fission theory is the traditional one in which the fertilized egg is incompletely split, causing delayed separation of the embryonic mass after day 12 of fertilization.
2. Fusion theory, in which the fertilized egg is completely separated, but the stem cells fuse with like-stem cells in the other twin, leading to fusion of both twins together.[2]

Five types of conjoined twins have been described:

1. Thoracopagus (joined at thorax).
2. Omphalopagus (joined at the anterior abdominal wall).
3. Craniopagus (joined at the cranium).
4. Syncephalus (joined twins with one head).
5. Ischiopagus (joined at the buttocks).[3]

Early diagnosis of conjoined twins was previously reported, but not before the 10th week of gestation.[4]

Cephalopagus twins are extremely rare with fusion of upper half the body with single cranium ,single or two face and four upper and four lower limbs and have poor prognosis. Due to the extreme degree of fusion these can be mistaken as singleton pregnancy in the early gestation . even the patient reffered to our department had previous usg report with single fetus with large head and gross abnormality.[5]

In conclusion, conjoined twins are associated with a high perinatal mortality; therefore, making an early diagnosis with ultrasonographic examination of conjoined twins gives the parents a chance to elect pregnancy termination.

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