



Case Study

Thoracophagus conjoined twin with one heart - Uncommon case

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ABSTRACT

Keywords

Conjoined,
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Conjoined twins represent one of rarest types of twin gestations, occurring in about 1% of monozygotic twins. Their estimated incidence ranges from 1/30,000 to 1/200,000 live births and 1 in 650 to 900 twin deliveries. ^{1, 8} A 30 year old gravida presented with a history of amenorrhea of 17 weeks and 2 days for a second routine ultrasound which demonstrated thoracophagus conjoined twins. Patient was admitted for termination of pregnancy after thorough discussion and explanation of this anomaly with the family. Family consent was obtained. She was induced with misoprostol (cytotec) 400mcg vaginally and orally but after 5 courses of cytotec the fetuses had not delivered. A Foley catheter filled with 60cc of saline was placed transcervically, and the patient expelled vaginally conjoined twins of combined weight around 320grs with one umbilical cord. The placenta was delivered manually under general anesthesia and placenta weighed 410grs. In conclusion, conjoined twins are present in Rwanda but an early diagnosis with specialized ultrasound can prevent fetal/maternal complications due to abnormal gestation.

Case presentation

A 30 year old gravida one presented for routine ultrasonography of morphology in the second trimester at 17 weeks and 2 days.

She had a previous antenatal visit in a private health facility where they performed the first ultrasound, which demonstrated normal single pregnancy. Her second ultrasound performed at the Butare University Teaching Hospital (BUTH) two months later showed thoracophagus conjoined twins with two heads, two upper and lower limbs seen separately and a single stomach, bladder and an anomalous heart_(1,2).

Placentation was monoamniotic and monozygotic. Cardiac activity was noted with anatomical defect (6 chambers) and common umbilical cord.

The patient was informed of the ultrasound findings and the implications of these findings were explained in detail so that the patient and her husband could make an informed decision. After thorough consultation, the decision was made to terminate the pregnancy due to excessive maternal risk with a lethal fetal anomaly.

The management was planned in BUTH/Obstetrics Gynecology Department after medical staff discussion.

The patient was admitted in our Department for termination of pregnancy. Her LMP was November 13th 2013 and her expected date of delivery was August 20th 2013 with gestational age of 17weeks and 2days.

Past medical, surgical and obstetrical histories were unremarkable.

No family history of twins, no medication taken or allergies known. Blood group O positive, HIV negative.

On general examination; her vital signs were stable.

On abdominal examination; Due to the gestational age, Leopold's maneuver was not performed and it was difficult to auscultate the fetal heart beat with the fetoscope.

The case was discussed during and interdisciplinary staff meeting which included six obstetricians who suggested termination. We informed all family about the fetal malformation and anticipated poor outcome. The family desired termination of pregnancy and a written informed consent was obtained.

The patient was planned for pregnancy termination at 17weeks 2days. A female thoracophagus conjoined twin of combined weight of 320 grs was delivered vaginally in breech presentation. The placental weight was 410grams which was removed manually under general anesthesia.⁴

Neonates showed some movement immediately after birth but a few seconds later died from cardiopulmonary failure.

On fetal physical examination, the twins were consistent with the gestational age and last menstrual period. Four arms and four legs were seen, two spines, two heads and the twins were fused on the thorax and abdomen. There was a single umbilical cord.

Discussion

Ultrasound in early second trimester must be done properly to rule out fetal malformations incompatible with life and to allow for an appropriate discussion of termination of pregnancy.

The factors that led to pregnancy termination in our case were cardiac anomaly (6 chambers) and to avoid maternal complications at advanced gestational age like Obstructed labor, Caesarian section, post-partum hemorrhage, Uterine rupture and maternal death.

Conjoined or Siamese twins result from incomplete segmentation of a single fertilized ovum between the 13th and 14th days after fertilization; if the cleavage is further postponed, incomplete twinning (2 heads, 1 body) may occur.

Lesser abnormalities are also noted, but they occur without regard to specific organ systems. Conjoined twins are described by site of union: Pygopagus (sacrum), Craniopagus (head), Omphalopagus (abdominal wall) and Thoracophagus (chest) but curiously, conjoined twins are most often female. In our case report, we found that both fetuses were female with chest fusion and one heart similarly to which described in some literatures and case reports (1,2,3,4,5,6,7,8,9,10).

Conclusion

In conclusion, conjoined twins are present in Rwanda but an early diagnosis with specialized ultrasound can prevent fetal maternal complications due to abnormal gestation.

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