

PRACTICAL EXERCISE 4

ARTICLE CRITIQUE

1. Critically evaluate the case report on “Conjoint twins”, including:
 - a. General organisation
 - b. Abstract and keywords
 - c. Body of the case report
 - d. Discussion
 - e. Acknowledgements
 - f. Figures, including the legends
 - g. References

CASE REPORTS:

CONJOINT TWINS WITH AN ACARDIACUS FETUSZahid Ahmad Hashmi,¹ Ghazala Bashir,² Fida-ullah Wazir³¹Department of Surgery, ²Department of Gynecology & Obstetrics and ³Department of Anatomy, [redacted] Medical College, D.I. Khan, Pakistan.

A 23 years old lady, a primigravida, presented to the Obstetric and Gynae Department of District Headquarter Teaching Hospital D.I. Khan for antenatal check up, with gestational age of 26 weeks.

On examination her fundal height was 30 weeks and multiple fetal parts were felt on palpation. Heart sounds of one fetus were absent. Ultra-sound examination showed conjoint twins. Both the fetuses were sharing the abdominal wall just above the entrance of the umbilical cord. This type of twin is called omphalopagus.

In both fetuses all the viscera were present except the absence of heart in one (acardiac). There was single placenta and umbilical cord.

She came regularly for her antenatal check-up. At gestational age of 37 weeks her elective caesarean section was planned. At the time of operation both paediatrician and surgeon were present in the operation theater.

Monozygotic conjoint twins were delivered with Apgar score of 8/10 and 10/10.

They were handed over to the surgeon, who under general anesthesia separated the normal baby from the amelic-acardiac baby.³

The abdominal wall of the normal baby was constructed using tissues of the abnormal baby. The contents of the site of union were a single artery and two veins. There were no abdominal viscera crossing the junction. The abnormal baby died instantaneously. The normal baby recovered with out any mishap.

Monozygotic twins have an incidence of 2.3-4 per 1000 pregnancies.^{1,5}

This comes to about 33% of all multiple pregnancies. The morbidity and mortality in multiple pregnancies is high. Complications include preterm labor, haemorrhage, urinary tract infection and pregnancy-induced hypertension.²

Monozygotic conjoint twins or Siamese twins are due to late separation of the embryos, developed from a single fertilized ovum. If the site of union is abdominal wall, it is called **Omphalopagus**.⁵ Usually the twins are females as in our case.



Conjoint twins
Showing omphalopagus acardiac second twin



Normal baby separated from acardiac twin



Acardiac second twin

A **fetus acardiacus** is a parasite monozygotic fetus without a heart. It receives nutrition from reversed circulation perfused by one artery-artery and one venous-venous anastomosis. It is a form of twin reversed arterial perfusion (TRAP) syndrome.

The donor twin is at risk of cardiac hypertrophy and failure with 35% mortality.

REFERENCES

1. Tessen JA, Zlatnik FJ. Monoamniotic twin: A retrospective controlled study. *Obstet Gynecol* 1991; 77: 832
2. B Melissa LP Martin .Eds. Multiple pregnancy current obstetric and gynecology. 9th ed. McGraw Hill: 2003; 315-325
3. Lenz W. Thalidomide and congenital abnormalities. *Lancet* 1962; 1:1219.
4. D Ansky, LV, Fimrell RH: parental epilepsy anticonvulsant drug and reproductive outcome epidemiology and experimental finding spanning 3 decades. Two human studies. *Reprod toxical* 1991; 5: 301.
5. Fisk N.M, multiple pregnancy, Dewhust 6th edition, by Edmends D Keith. 2000.