

## CASE REPORT

# A Rare Case of Parapagus Dicephalus Conjoined Twins Discordant for Anencephaly: A Case Report

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## ABSTRACT

Monozygotic and monoamniotic twins has maximum complications among these conjoined twins is a rare complication. Development of conjoined twin in monozygotic twins depend upon the period at which the division occurs. If division occurs after 13 days of ovulation the conjoined twins will form. Conjoint twins is a rare entity. This report presents a case of a primigravida at 18 weeks gestation with parapagus conjoined twins. Which was diagnosed by ultrasonography and underwent into second trimester termination.

## KEYWORDS

• Primigravida • Monochorionic monoamniotic twins • Parapagus • Conjoined twins

## INTRODUCTION

One of the interesting anomaly unique in multiple pregnancy is conjoined twins. Mechanism underlying monozygotic twinning are poorly understood. One association is Artificial reproductive technology and in vitro fertilization the monozygotic twinning incidence is twofold greater in pregnancies conceived using blastocyst transfer compared with transfer of a later-stage embryo. The outcome of the monozygotic twinning process

depends on when the zygotes division occurs, If splitting occur after 13 days conjoint twins will form.<sup>1</sup> Discordant malformation more seen in monozygotic twins as the formation of monozygotic twinning is a teratogenic event. Conjoint twins are classified based on the site of fusion. Thoracophagus, omphalophagus, Thoraco-omphalophagus, ischiopagus and parapagus are the most commonly reported varieties of conjointtwins<sup>2</sup>.

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Multiple factors, such as alcohol consumption, drug use, radiation or chemical exposure and lack of folic acid supplementation during pregnancy are risk factors for the development of congenital anomalies<sup>3</sup>. First trimester sonography is helpful to identify the number of fetuses, number of placentas and its location and a gross anomaly also.

### CASE PRESENTATION

A 22-year-old primigravida woman with a twin pregnancy, conceived normally, presented with a 5-month amenorrhea. Her last menstrual period (LMP) was 28<sup>th</sup> November 2023 and she presented on her 18 weeks of gestation in hospital. There was no family history of twin pregnancy. On examination she was of average build and well nourished. Physical and systemic examination was normal. Per abdominal examination finding-fundal height corresponding to 18 weeks of gestation. On auscultation one fetal heart sound localized which was regular. Blood group O+ve, HB-13gm/dl, viral markers-negative. Obstetric ultrasonography was done and twins pregnancy revealed, monochorionic monoamniotic conjoined twins of 18 weeks gestation. Fetus had two heads (dicephalus) with anencephaly in one head, two upper extremities (bibrachilus), with two lower extremities (bipus). Fusion was seen at lateral side at thorax and abdomen level. Only one heart and one stomach were visualized. Placenta was posterior and liquor adequate. Patient and her husband were counseled about the termination of pregnancy as this fetus is incompatible for life. We planned for 2<sup>nd</sup> trimester termination of pregnancy as fetus is incompatible for life. She delivered conjoined twins female abortus of 350gm 2<sup>nd</sup> baby had neural tube defect anencephaly. Post partum period was uneventful.

Patient was advised to take folic acid 5mg once a day for 3 months pre-conceptional to avoid future anomaly.

### DISCUSSION

Conjoined twins occur at the frequency of 1 in 50,000 to 1 in 1,00,000. The etiology is not well proven. Incomplete division of monozygotic embryo is most acceptable theory for conjoined twins. The condition is more common in female<sup>4</sup>.

The conjoined twins in early pregnancy. Early diagnosis of conjoined twins is not reported prior to 10 weeks.<sup>5</sup> Once the diagnosis of conjoined twins is confirmed by ultrasonography then severity of abnormality can be confirmed by 3D-ultrasonography, Computed tomography and magnetic resonance imaging. Further management depends on the severity of fusion. Separation of conjoined twins is a complicated procedure. A multidisciplinary team work is required (pediatric surgeon, Plastic surgeon, anesthetic and nursing)



### CONCLUSION

Despite of surgical advancement and technology conjoined twins mortality is very high and the separation procedure is difficult, so survival of babies is less. High detection rate of conjoined twins with ultrasonography may give an option for early termination of incompatible to life babies as early.

Consent of patient/legally acceptable representative: WE, authors hereby declare that we have taken informed consent from the patient and her relatives and also further declare that we have no financial interest for the article.

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