

A Case Report of DCDA Twin Gestation and Its Fetal and Maternal Outcome

Dr. Rita D¹, Dr. Shirisha Rani²

¹Professor and HOD, ²Junior Resident,
^{1,2}Department of Obstetrics and Gynaecology, Navodaya Medical College, Hospital and Research Centre,
Raichur

Corresponding Author: Dr. Shirisha Rani

DOI: <https://doi.org/10.52403/ijhsr.20250938>

ABSTRACT

Dichorionic Diamniotic (DCDA) twin pregnancies are the most common type of twin gestation, characterized by two separate placentas and amniotic sacs, and generally present with fewer complications than monochorionic twins. A case of a 26-year-old G2P1D1 woman with a spontaneous conception and no family history of twins, who presented with history of 9 months of amenorrhoea came for safe confinement. Her antenatal course was uneventful, and DCDA twin gestation was diagnosed during a dating scan. Vitals, general physical examination was uneventful. Per Abdomen corresponds to 37 weeks of gestation. This case highlights the importance of High-Risk Pregnancy, regular monitoring, and multidisciplinary care in managing twin pregnancies to ensure optimal maternal and fetal outcomes.

Keywords: Multiple pregnancy, Dichorionic Diamniotic twin gestation.

INTRODUCTION

When more than one fetus simultaneously develops in the uterus, it is called multiple pregnancy. Multiple gestations are described by zygosity, amnionicity and chorionicity. The rate of twin births is 33.3 twins per 1000 births. Dizygotic or fraternal twins result from the maturation and fertilization of two ova during a single ovulatory cycle. The rate of Dizygotic twinning varies from 4-50 per 1000 births. Monozygotic or identical twins arise from a single fertilized ovum. The rate of Monozygotic twinning is 3-5 per 1000 births.^[1]

CASE REPORT

A 26-year-old booked case of Gravida 2 Para 1Dead1 with 9 months of amenorrhoea

came to outpatient department came for safe confinement. By USG 37wks+2days period of gestation with detailed growth scan was done and patient was admitted. In early weeks of gestation

diagnosed with Dichorionic Diamniotic twin gestation by dating USG, who conceived spontaneously and had regular ANC visits with ANC profile in our hospital. There was no family history of twins and her antenatal period was uneventful. Anomaly scan was done at 20 weeks period of gestation and no congenital malformations were seen. Prophylactic Betamethasone coverage was given at 33 weeks of gestation.

General Examination: Patient is moderately built and nourished, afebrile, no pallor, no pedal edema. BP- 110/70mmhg, PR- 82bpm

Systemic Examination: CVS/ CNS/RS - Normal

Per Abdomen Examination: Symphysiofundal height corresponding to term size. (more than Period of gestation)
Abdominal girth -102cm



Fig 1: Per Abdomen

Palpation: Three fetal poles are felt
Multiple Fetal parts are felt.

Auscultation -2 FHR heard at 2 different points 10 cm apart simultaneously.
NST 1 - Reassuring, NST 2 - Reassuring

Investigations

Hb-13.2gm%, Total count-9,700 cells/cumm, Platelet count-1.81 lakhs /cumm

Blood grouping and typing- A Positive

Serology- non reactive.

Coagulation profile -normal.

Ultrasonography shows-Dichorionic Diamniotic twin Gestation corresponding to 35 weeks twin 1 (Cephalic)and 35 weeks + 4 days twin 2(Cephalic)with intertwin dividing membrane.

Placenta-Twin 1 Fundal posterior grade 2, Twin 2 Fundal anterior grade 2

AFI-9-10cm in both sacs.



Fig 2: USG showing intertwin membrane. (Twin Peak Sign/Lambda sign)

MANAGEMENT

Patient was taken for Elective lower segment Caesarean section. Extracted Twin 1 A single live term female baby of birth weight 2.098 kg at 10am followed by

Breech extraction of Twin 2 A single live term male baby of birth weight 2.469 kg at 10:07 am on 3/11/2023. Two resuscitative teams were kept ready to receive the babies.

Both the babies cried immediately after birth and no congenital anomaly was found in them. Dichorionic Diamniotic placenta

delivered by controlled cord traction. Weight of the placenta was 750gm. Patient was discharged on post operative day 6.



Fig.3: Dichorionic Diamniotic placenta with intertwin membrane



Fig. 4: DCDA placenta with 2 umbilical cords. Fig. 5: Babies with DCDA Placenta

DISCUSSION

Zygosity refers to the type of conception, chorionicity refers to the placentation or the number of placentae, which can be determined by antenatal ultrasound or by examination of the placenta and membranes at birth.^[1] The number and rate of multiple pregnancies have increased over the past two decades, during which the number of twin deliveries rose by 65 percent, and the rate of triplet and higher-order multiple pregnancies increased by more than 400 percent.^[2] Advancing maternal age and use of assisted reproductive technology being the two major contributing factors.^[3] There is increased maternal morbidity, perinatal morbidity and mortality in multiple pregnancies. 3-7 times more maternal complications are seen in multiple pregnancies.^[4] Severe birthweight discordancy (>20%) occurred more often in MC twins than in DC twins. Chorionic and

amnioticity can be determined by ultrasound in the first trimester with 90-100% accuracy. Fetal lung maturity occurs at an earlier Gestation in multiple pregnancy.^[5]

CONCLUSION

Multiple gestation is a significant risk factor for both maternal and perinatal morbidity and mortality. Hence Early diagnosis is important. More number of ANC visits are required for early detection and prevention of High-risk Pregnancies (Anaemia, PIH, Preclampsia, gestational diabetes, polyhydramnios, Preterm labour) Antenatal Corticosteroid therapy must be given to prevent fetal complications like Respiratory Distress Syndrome, NICU admissions and neonatal complications.

Declaration by Authors

Acknowledgement: None

Source of Funding: None

Conflict of Interest: The authors declare no conflict of interest.

REFERENCES

1. Ian Donalds practical Obstetric problems 8th edition, editor: Renu Misra, page no.398.
2. Dodd J, Crowther C. Multifetal pregnancy reduction of triplet and higher-order multiple pregnancies to twins. *Fertil Steril.* 2004; 81:1420. doi: 10.1016/j.fertnstert.2003.11.028.
3. Ratha C, Kaul A. An analysis of pregnancy outcome in dichorionic and monochorionic twins given special antenatal and intranatal care: a four-year survey. *J Obstet Gynaecol*

India. 2014 Aug;64(4):255-9. doi: 10.1007/s13224-014-0507-6.

4. Kalyankar BV, Kalyankar VY, Gadappa SN, Gaikwad P. A clinical study of maternal and fetal outcome in multiple gestations. *The New Indian Journal of OBGYN.* 2023; 10(1): 178-82
5. Hack KE, Derks JB, Elias SG, et al. Increased perinatal mortality and morbidity in monochorionic versus dichorionic twin pregnancies: clinical implications of a large Dutch cohort study. *BJOG.* 2008;115(1):58–67.doi: 10.1111/j.1471-0528.2007.

How to cite this article: Rita D, Shirisha Rani. A case report of DCDA twin gestation and its fetal and maternal outcome. *Int J Health Sci Res.* 2025; 15(9):364-367. DOI: <https://doi.org/10.52403/ijhsr.20250938>
