

MATERNAL AND PERINATAL OUTCOME IN TWIN GESTATION AT TERTIARY CENTER

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ABSTRACT

Twin gestation is considered as high risk pregnancy due to associated high maternal morbidity and perinatal mortality in comparison with singleton pregnancies. Overall, the rate of twin gestation is on rise due to inadvertent use of ovulation induction drugs in assisted reproductive techniques. Twin pregnancies are associated with preterm birth and neonatal deaths. this study to evaluate the outcome of twin pregnancy.

Methods: It's a retrospective study conducted in Department of Obstetrics and Gynecology, ESIMC PGI MSR Bangalore, Karnataka. This observational study was carried out to find the maternal and perinatal outcome in 100 cases of twin gestation delivered at tertiary care referral hospital over a period of 30 months. **Result:** In our study

out of 100 women, Primi are 55 in number and Multi are 45 in number, women delivering vaginally are 35, LSCS are 65, with perinatal deaths of 8 fetus. **Conclusion:** Twin pregnancies are associated with variety of maternal and fetal complications comes under high risk case. Early diagnosis, antenatal care and hospital delivery are necessary for better maternal and perinatal outcome.

KEYWORDS: Twin gestation, Perinatal outcome, Preterm labour, Low birth weight.

INTRODUCTION

Twin pregnancy is considered as a high risk pregnancy. Globally, the highest burden of multiple births has been found in sub-Saharan Africa, with an average twinning rate of 20 per 1,000 deliveries. In India, twinning occurs in approximately 1% of pregnancies and has been reported to be responsible for 10% of perinatal mortality.^[1,2,3]

The main cause of adverse neonatal outcome in twin are related to prematurity, fetal growth restriction, low birth weight.^[4] The risk of anomalies are 1.7 times higher than among singleton pregnancies and is more in monozygotic.^[5]

Fetal complications are reported to be more in monozygotic pregnancies as compared to dizygotic twins. Monochorionic twin gestations are at higher risk of preterm labour, discordant fetal growth, abnormal vascular communications, fetal malformations, cord complications and stillbirths.^[6]

Preterm birth is seen in 54% of all twins, half of these births have an iatrogenic origin and are related to maternal or fetal complications while other half consists of cases if prom.^[7]

METHODS

This is a hospital based observational study.

The study was conducted in the Institute of Obstetrics and Gynecology ESIC PGIMSR BANGALORE.

From the inpatient clinics, 100 pregnant women irrespective of gestational age were selected during the study period. The data was collected from the medical record section like age, parity, gestational age, mode of delivery, weight of the baby, NICU admission and complications associated with pregnancy.

RESULT

The following is the result obtained from our study.

1. AGE AND PARITY.

PRIMI	MULTI	AGE			
55 (55%)	45(45%)	<20	20-25	26 -30	31-35
		6	58	32	4

2. GESTATIONAL AGE.

Less than 34	15
34-36	45
>37	40

3. TYPE OF TWIN.

MCMA	MCDA	DCDA	DAMC
	27	58	15

4. MODE OF DELIVERY.

VAGINAL	LSCS
35	65

5. WEIGHT OF BABY.

< 1 KG	1-1.5	1.5-2	2-2.5	>2.5
8	16	56	104	18

6. NICU ADMISSION.

PREMATURITY	16
BIRTH ASPHYXIA	4

7. COMPLICATIONS.

Abruption	4
LSCS	65
IUD	1
RH negative	1
PIH	4
CPD	1
Post LSCS	4
PROM	5
PPROM	2
Footling presentation	1
Eclampsia	3
Anemia	10

DISCUSSION

In our study 55 women are primi, 45 women are multi. With gestational age of less than 34 are 15, 34 to 36 are 45 and > 37 are 40. With vaginal birth of 35 and LSCS 65 following which NICU admission for Prematurity are 16 and Birth asphyxia 4. Perinatal mortality of 8 fetus.

With complications in mother like anemia 10% correlates with Spellacy *et al.*^[8] and Sultana *et al.*^[9] with 9% and 13% respectively, APH 4% correlating with Sultana *et al.* and Bangal *et al.*^[10] with 6% and 4% respectively, LSCS 65% comparing with Sultana 70%, Hypertension 7% comparing with 22% of Bangal *et al.* and Spellacy 12%, PROM 6% which correlates with 3.8% in Bangal *et al.*, Chowdary^[11] with 3.8% and Sultana 10%.

Majority of twins were common in primi about 55% which contrary with studies showing more in multi like Chowdary 64%, Spellacy 84%, 66% in Sultana. More twin pregnancy is

seen in age group between 20 – 25 with 58% correlate with Sultana 60% and 82% in Bangal study.

Preterm delivery seen in 60% in our study comparing to Bangal 88%, increased compare Sultana 38%, Chowdary 44%.

Perinatal mortality in our study is 8% compared to 11 in several other studies.

Birth weight of most of babies are between 2 – 2.5kg in our study compared to Chowdary 2.1kg, Sultana 1.5-2.5kg.

CONCLUSION

Twin pregnancies are associated with variety of maternal and fetal complications comes under high risk case. Early diagnosis, antenatal care and hospital delivery are necessary for better maternal and perinatal outcome.

REFERENCE

1. Bortolus R, Parazzini F, Chatenoud L, Benzi G, Bianchi MM, Marini A. The epidemiology of multiple births. *HumReprod Update*, 1999; 5: 179-87.
2. Hoekstra C, Zhao ZZ, Lambalk CB, Willemsen G, Martin NG, Boomsma DI et al. Dizygotic twinning. *Hu Reprod Update*, 2008; 14: 37-47.
3. Nylander PP. The factors that influence twinning rates. *Acta Genet Med Gemellol* (Roma), 1981; 30: 18.
4. Glinianaia SV, Rankin J, Renwick M. Time trends in twin perinatal mortality in northern England, 1982-94. Northern Region Perinatal Mortality Survey Steering Group. *Twin Res*, 1998; 1(4): 189-95.
5. Birzot M, Fujita M, Reis N et al. Malformacoes fetais em gestacao multipla. *Rev Bras Gynecol Obstet*, 2000; 22(8): 5111-7.
6. Pope RJ, Weintraub AY, Sheiner E. Vaginal delivery of vertex–nonvertex twins: a fading skill? *Arch Gynecol Obstet.*, 2010; 282: 117– 120. doi: 10.1007/s00404-010-1458-5.
7. Gardner MO, Goldenberg RL et al. The origin and outcome of preterm twin pregnancies. *Gynecol Obstet*, 1995; 85(4): 553-7.
8. Spellacy WN, Handler A, Ferre CD. A case control study of 1253 twin pregnancies from 1982-1987. *P erinatal data base.*, 1990; 75: 198-71.

9. Sultana H. Fetal and maternal outcome of twin pregnancy – A study of 50 cases, Bangladesh College of Physicians and surgeons, Dhaka, 2002.
10. Bangala et al, IJBAR (2012)03(10), STUDY OF MATERNAL AND FETAL OUTCOME IN TWIN GESTATION AT TERTIARY CARE TEACHING HOSPITAL.
11. Chowdary S. Clinical study on twin pregnancies, FCPS, Bangladesh College of Physicians and surgeons Dhaka, 1998.