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RESEARCH ARTICLE

A CLINICAL STUDY ON 152 PREGNANT WOMEN WITH TWIN GESTATION-MATERNAL COMPLICATIONS AND NEONATAL OUTCOME IN A TERTIARY CARE CENTRE

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ABSTRACT

Objective: To study the maternal and neonatal outcome in multifetal gestation in a tertiary care centre

Method: A retrospective observational analysis of 152 twin pregnancies admitted and managed at Govt. Rajaji Hospital, Madurai from May 2016 to April 2017 was done. Patients were studied for any adverse antenatal complications, mode of delivery and pregnancy outcome both maternal and perinatal.

Results: Most common indication for admission was threatened preterm labour, Anaemia, Non severe preeclampsia. Out of the 152 patients 77 delivered at GRH(50%), others delivered at their native places, out of which 44 delivered by vaginal route (57%) whereas 33(42%) had to undergo caesarean section. Malpresentation of the first twin was the commonest indication (42%) for caesarean section. Out of the 77 women of twin pregnancy giving birth to 142 live-born babies, out of which 3(2%) were single fetal demises, and 9(6%) died due to complications related to prematurity: hyaline membrane disease, hyperbilirubinemia.

Conclusion: The risk of pregnancy related complications in twin gestation are definitely more than a singleton pregnancy. Early detection and proper management of twin pregnancies can reduce the complication rates thereby improving maternal and neonatal outcome

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INTRODUCTION

Multiple gestation currently account for 3% of pregnancies. Compared to singleton pregnancies the perinatal mortality, morbidity and neuro-developmental disability are increased 5-10 fold in twin pregnancies. Women with more than one fetus are 2-4 times more likely to experience complications of pregnancy. This retrospective observational study of 152 women with twin pregnancy was conducted to evaluate pregnancy related complications in the mother and neonatal outcome in a tertiary care centre.

METHODS

This retrospective study was conducted at Government Rajaji Hospital Madurai, Tamil Nadu in India. 152 consecutive Women with twin pregnancies that were admitted either as registered antenatal patients or referral cases in the year 2016-2017 were studied. Individual patient parameters like age,

parity, duration of gestation, physical examination, mode of delivery, antepartum, intrapartum and postpartum complications were tabulated. Neonatal morbidity and mortality in the first week were also noted. Results of routine and specialized investigations and ultrasonography were recorded. Data thus obtained was analysed and results studied.

RESULTS

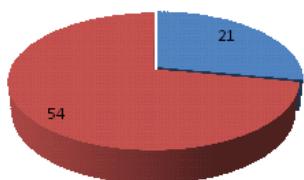
Majority of patients studied were in the age group of 26-35 years (mean age-29 years) (Table 2). 34% patients were primigravidae and 28% were paral (Table 1). Most of the women (82%) at the time of admission were in the third trimester (Table 3) with 70% patients in the 28-36 weeks gestational age.

DISCUSSION

Twin pregnancy constitutes an important portion of high risk pregnancies attending any obstetric health care facility. 60% patients in our study were Multigravidae and the highest number of patients was in the age group 26-30 years (46.6%) with mean maternal age of 26 years.

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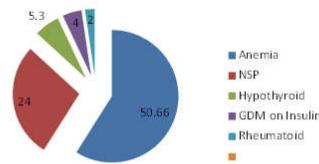
Total Cases

TOTAL CASES	152
Antenatal	75
Postnatal	77
Admission	75

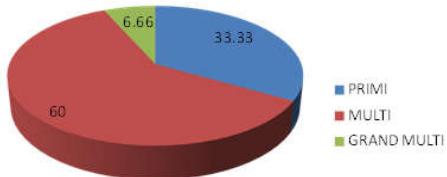
MCDA	21%
DCDA	72%

ANTENATAL MOTHER WITH CO-MORBIDITIES

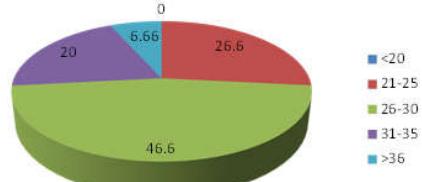
Co Morbis



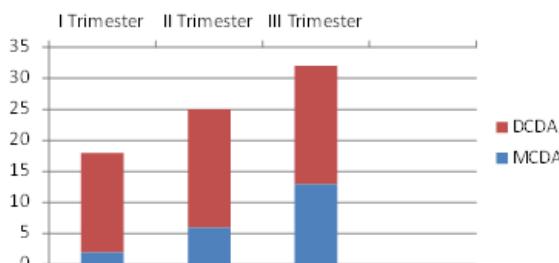
ANEMIA	38	50.66%
NSP	18	24%
HYPOTHYROID	4	5.3%
GDM ON INSULIN	3	4%
RHEUMATOID ARTHRITIS	2	2%

DISTRIBUTION OF WOMEN ACCORDING TO PARITY

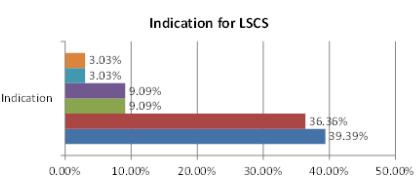
PARITY	NO. OF CASES	%
PRIMI	25	33.33
MULTI	45	60%
GRAND MULTI	5	6.66%

DISTRIBUTION OF WOMEN ACCORDING TO AGE

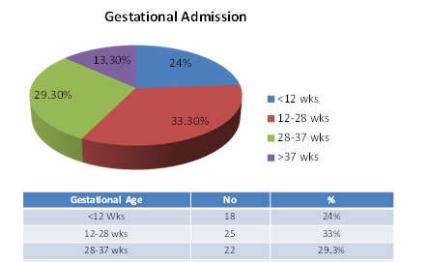
PATIENT AGE	NO	%
<20 yrs	0	0
21-25	20	26.6%
26-30	35	46.6%
31-35	15	20%
>36	5	6.66%

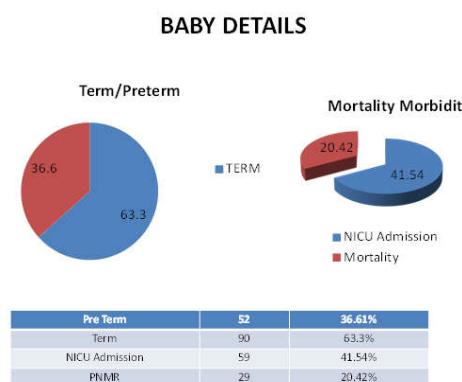
A.N. ADMISSION IN EACH TRIMESTER ACCORDING TO CHORIONICITY

E	MCDA	DCDA
I TRIMESTER	2	16
II TRIMESTER	6	19
III TRIMESTER	13	19

INDICATION FOR LSCS

MCDA	13	39.39%
1 st Twin Non Cephalic	12	36.36%
DCDA with Fetal Distress	3	9.0%
Single Fetal Demise	3	9.0%
Abruption	1	3.03%
Hysterotomy	1	3.03%

DISTRIBUTION OF WOMEN ACCORDING TO GESTATIONAL AGE AT ADMISSION



Women with multiple pregnancy are at increased risk of anemia, preterm labour, pre-eclampsia and post-partum haemorrhage. 70% of women with twin pregnancy in our study had one or more than one obstetric complication. Preterm labour and delivery was seen in 36% of cases followed by anaemia in 38.9% and gestational hypertension in 28.57% [Javed Ali, 2017]. Out of 77 postnatal cases 44 delivered by LN(57.14%), others by LSCS 33(42.85%) [The American College of Obstetricians and Gynecologists Committee on Obstetric Practice, 2017]. MCDA twin being the commonest indication (39.39%) for LSCS followed by malpresentation (36.36%).out of that 36%patients delivered preterm and 63% were term deliveries. Out of 152 liveborn babies, 9 died (6%) at the end of first week mostly due to sequel of preterm birth, hyaline membrane disease, hyperbilirubinemia. Prematurity is the leading cause of perinatal mortality in multiple pregnancy.

Conclusion

Complications associated with higher order pregnancies cannot be prevented but can be detected early and controlled adequately by proper and prompt management. Regular and more frequent antenatal checkup with liberal hospital admission policy in twin pregnancy is essential to reduce adverse pregnancy outcome in such women.

Acknowledgement

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Compliance with Ethical statement

The authors declare that they have no conflict of interest.

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