ORIGINAL RESEARCH PAPER

Gynaecology

A CLINICAL STUDY ON PREGNANCY OUTCOME IN MULTIFETAL GESTATION

KEY WORDS:
Fluoroquinolones,disc diffusion method, clsi guidelines, resistance.

Dr. Kalaivani MD.,DGO.,DNB{OG}, Government RSRM Lying In Hospital, Cemetry Road, Royapuram, Chennai-600013

ABSTRACT

INTRODUCTION: At first glance,multiple gestation is often considered a novelty,with pleasant images of identical children. Multifetal gestations account for fewer than 1% of births. However the perinatal mortality and morbidity is considerably higher. Recently,the advent of superovulation has increased the rate of multifetal gestations.Assissted conception has increased the incidence of multiple pregnancy.Morbidity is also increased with associated long term sequelae including cerebral palsy.There is also adverse effect on the maternal outcome.Maternal complications like anaemia,pregnancy induced hypertension,PPH are notably increased.Success in managing multifetal gestation depends on better understanding of the twinning phenomenon, early diagnosis,fetal monitoring,psychological counseling,clinical skills and timely intervention.

In india, twin pregnancies are classified into two groups,one arising spontaneously and the other arising due to assisted reproductive technologies.Rate of twinning varies with race,heredity,maternal age, parity,nutrition,levels of endogenous hormones.Various maternal risks associated with multiple pregnancy include anaemia, hydraminos,PIH,preterm labour ,PPH etc. On the other hand, the fetal complications include stillbirth, congenital anomalies, twin to twin transfusion syndrome,twin entrapment, twin interlocking etc.Incidence of anaemia is increased to approximately 40% and that of PIH to 26%.Looking at the perinatal mortality,the mortality of twin 2 is more than that of twin 1.During labour,the total duration of labour is similar to singleton gestation. The method of delivery dpends upon the number of fetuses, presentation of the first fetus and gestational age. Multiple gestations account for about 17%of the growth restriction. Prematurity rather than ntrauterine growth restriction exerts the dominant effect on birth weight and accounts as the main cause of perinatal mortality.The timing of delivery of the second twin also plays an important role.Mortality rates are higher in primis and lower in multigravidas.Labour natural and LSCS have a better outcome than other methods.Birth weight of the babies is the most important factor that determines the perinatal outcome. Ultrasound evaluation is the single most important diagnostic test in multiple gestation.

COONCLUSION: Early detection of maternal complications and its management will improve outcome.Immediate neonatal intensive care contributes to improved perinatal and neonatal outcome. Hence women with multiple gestation should ideally receive antenatal care in special twin clinics.The twin clinic should also provide a strucutured plan that will enable early detection and effective management of antenatal,intrapartum and postnatal needs of the parets.Twin clinics can also provide a base for what has been an under-researched aspect of obstetrics.

INTRODUCTION:

At first glance, multiple gestation is often considered a novelty, with pleasant images of identical children.Infact multifetal gestation poses significsnt risk for both the mother and fetus. Multifetal gestations account for fewer than 1% of births. However the perinatal mortality and morbidity is considerably higher. Recently, the advent of superovulation has increased the rate of multifetal gestations.Assissted conception has increased the incidence of multiple pregnancy.Morbidity is also increased with associated long term sequelae including cerebral palsy.There is also adverse effect on the maternal outcome.Maternal complications like anaemia,pregnancy induced hypertension,PPH are notably increased.In general,all potential complications with multiple pregnancies are more frequent and more serious as the number of fetuses increase.Success in managing multifetal gestation depends on better understanding of the twinning phenomenon,early diagnosis,fetal monitoring,psychological counseling,clinical skills and timely intervention.Serious efforts have been made to unify all kinds of contribution on twins into a single branch of science called gemellology.

AIMS AND OBJECTIVES:

The aims and objectives of this study are to find out
1.The perinatal mortality and morbidity
2.Pregnancy outcome in 150 cases of multiple pregnancy

To study the influence of
1.Pregnancy complications like anaemia,PIH,PPH
2.Presentation of fetuses
3.Method of delivery of fetuses
4.Time interval between delivery of the fetuses
5.Zygosity of multiple pregnancy on pregnancy outcome
6.Cause of perinatal death in multiple pregnancies

MATERIALS AND METHODS:

The clinical material was taken fom government RSRM hospital which consists of 150 multiple pregnancies .During this study period ,13,000 patients were admitted for delivery

INCLUSION CRITERIA

1.Women with overdistended uterus
2.Women with multiple fetal parts
3.Women who were diagnosed elsewhere as multiple gestation
3.Women with a family history of multiple gestation

RESULTS AND ANALYSIS

During the period of study,there were 148 twins and two triplets studied.

TOTAL	NO.OF TWINS	NO.OF TRIPLETS	TOTAL MULTIPLE PREGNANCIES	INCIDENCE
13,000	162	2	164	11.1%

INCIDENCE IN RELATION TO MATERNAL AGE

AGE	NUMBER	PERCENTAGE
<20	13	8.7
20-24	83	55.3
25-29	41	27.3
30-34	12	8.0

PARITY AND MULTPLE PREGNANCY

PARITY	NUMBER	PERCENTAGE
PRIMI	55	36.7
GRAVIDA 2	60	40
GRAVIDA 3	23	15.3
GRAVIDA 4	9	6.0

COMPLICATIONS AND MULTIPLE PREGNANCY

Incidence of PROM was 22%in the study group when compared to 10%in the general population and othe incidence of atonic PPH was 7.3%when compared to 5.2%in the general population

CHORIONICITY IN MULTIPLE PREGNANCY

CHORIONICITY	NUMBER	PERCENTAGE
DCDA	90	60.8%
MCDA	56	37.8%
MCMA	2	1.4%

PERINATAL MORATLITY AND MULTIPLE PREGNANCY

Perinatal mortality in multiple gestation is 142/1000 births in this series. This is 3 times higher than the the rate in general population which is around 42/1000 births.The second and subsequent fetuses are at an increased rate of risk than the first one.This is probably due to intrapatum hypoxia and mechanical causes like cord prolapse.

PERINATAL MORTALITY AND MODE OF DELIVERY:
In this study, perinatal mortality is highest in assisted breech delivery, the rate being 254/1000 births. The perinatal mortality is highest if the birth weight is less than 1.5kg.

CAUSES OF PERINATAL DEATH IN THIS STUDY

INTRAUTERINE DEATH	10
PREMATURITY	10
ASPHYXIA	3
SEPTICEMIA	1
CONGENITAL ANOMALIES	3
IUGR	3

CONCLUSION:

Perinatal mortality and morbidity are significantly higher in multiple gestations than singleton pregnancies.All patients with multiple gestation should have a thorough first and second trimester ultrasound examination to assess for chorionicity, amnionicity, individual fetal growth and congenital malformations. Prophylactic circlage or tocolytics do not have any proven advantage in the management of multifetal gestation.Early detection of maternal complications and its management will improve the outcome.The presentation of each fetus should be sonographically verified as soon as the patient with multiple pregnancy presents in labour.Active management of the second twin with an optimal time interval of 15minutes improves the perinatal outcome.Hence twin clinics should be established to focus on education about prevention of preterm birth,intensive maternal surveillance and more importantly a consistent care could reduce the incidence of very low birth weight deliveries due to preterm labour and associated perinatal mortality.Twin clinics can also provide a base for what has been an under researched aspect of obstetrics.

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