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Fetomaternal Outcome in Multiple Pregnancy- A Prospective Analysis

KEYWORDS: multiple pregnancy , monozygotic and dizygotic twin ,maternal and fetal complications.

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ABSTRACT *OBJECTIVE: Multiple pregnancy needs special attention as it is associated with an increased risk for mother and foetus. This study evaluate the risk of delivery complications and adverse perinatal outcome in females with multiple pregnancy.*

Methodology;In this prospective cohort study conducted in department of obs/gyn JLN Medical College Ajmer, around 100 cases of multiple pregnancy were taken into consideration and patients were followed up from admission till delivery and neonatal outcome analysed. Main outcome measures were maternal complications (anaemia ,preterm labour ,PIH ,PPH) etc) perinatal mortality and morbidity.

Results; Incidence of twin pregnancy was 1:66, 63% were from rural areas ,34%were primigravida, and 62% were second to sixth gravida with family history found in 16%cases.In 43% cases vertex presentation and in remaining vertex breech being commonest. Incidence of operative delivery was 30% and spontaneous delivery was 70% incidence of monozygotic twin was 38% and dizygotic twin was 62% .

Introduction; Multiple pregnancy refers to a pregnancy in which 2 or more foetus are present in the womb. It is a very challenging obstetric complications. Their frequency increased in past two decades, as a result of ovulation induction and ART. It is frequently associated with various maternal hazard and complications. Multiple pregnancy present with different ante, intra and postpartum complications, with increased morbidity and perinatal mortality. Twin gestation accounts for 3% of all pregnancies. There are two different types of twins monozygotic and dizygotic. Monozygotic twins are at greater risk. Its felt need to ascertain causes, outcome of multiple pregnancy along with their proper management in antenatal and postnatal period. Multiple pregnancy puts mother at risk of miscarriage ,pre eclampsia, APH, PPH, Iron and folic acid deficiency anaemia, polyhydramnios, preterm labour, PROM and increased rate of caesarean section.

METHOD: The study was conducted in the Department of Obstetics and Gynaecology of J.L.N. Medical College at Rajkiya Mahila Chikitsalaya, Ajmer. 100 cases of multiple pregnancy were admitted in hospital between Jan. 2014 to August 2015 and studied. All the patients with gestation age <28weeks were excluded from study. Infants having birth weight < 1 kg were also not included.

Table-1: Showing distribution of cases according to age group

Age (years)	No. Of Cases	%
19-22	20	20
23-26	47	47
27-30	15	15
31-34	13	13
>34	5	5
Total	100	100

Table-2: Showing distribution according to period of gestation at time of delivery

Period of gestation (in weeks)	No. Of Cases	%
<30	7	7
31-33	33	33
34-36	37	37
37-38	21	21
>38	2	2
Total	100	100

Table-3: Showing different mode of delivery

Mode of delivery	1st Baby	2nd Baby	3rd Baby	%
Vaginal Vertex delivery	53	40	93	45.8%
Assisted breech delivery	17	26	46	22.6%
Internal podalic version & breech extraction	-	4	4	1.97%
Forceps delivery	-	-	-	-
Caesarean section	30	30	60	29.55%

Table-4: Showing cases of neonatal morbidity

Neonatal Morbidity	No. Of cases	Percentage
Prematurity	23	26.13
Neonatal Septicaemia	12	13.63
Birth Asphyxia	9	10.22
Respiratory distress	13	14.77
Jaundice	9	10.22
Neonatal Convulsion	3	3.40
Anemia	6	6.81
Intracranial Haemorrhage	2	2.27
Umbilical Sepsis	2	2.27
Congenital Malformation	9	10.22
Total	88	100

Discussion

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DISCUSSION Twin pregnancy is a high risk pregnancy associated with increased maternal morbidity and increased perinatal morbidity and mortality. The incidence of twin pregnancy in this study was 1.66 A relatively high rate can be explained on the basis that J.L.N. Hospital being a referral centre from rural . The highest incidence was found in women age group between 21-30 , which reported that bearing children at older age results in multiple gestations. Most of the women presented with preterm labour at 36 weeks. Mean gestational age at birth inversely related to plurality.

Cerebral palsy is more common among multiple birth than single births, being 2.3 per 1,000 survivors in singletons, 13 in twins and 45 in triplets. Multiples are known to have a higher mortality rate. Today many pregnancies are the result of fertility therapy, so limiting the number of embryo transferred can reduce the risk of having multiples and so reduce the risk associated with multiple pregnancies. Multiple pregnancy puts mother at risk of miscarriage, pre-eclampsia, APH, PPH, iron and folic acid deficiency anaemia, polyhydramnios, preterm labour, PROM and increased rate of caesarean section. Pre-eclampsia is 2–3 times more common in multiple than singleton pregnancy and likely to be more severe. Every woman with a high order multiple pregnancy should be counselled about the risk of continuing the pregnancy, the likely management and the offer of multifoetal pregnancy reduction (MFPR). Higher order multiple pregnancies should be managed in tertiary perinatal centres with a foetal medicine service.

Conclusions;Multiple pregnancy are high risk pregnancy with increased incidenceof perinatal mortality ,mean age of patients 24-25 years with incidence of turn 1:60perinatal complication were much higher in form of PIH, anaemia, eclampsia APH and polyhydramnios and PPH.Proper antenatal care with timely decisions can lead to better fetomaternal outcome. Antenatal care proved to be an important factor in lowering incidence of perinatal mortality.among total perinatal mortality,21%were in first born baby as compared to second born, 19%and more in monozygotic twins.

RECOMMENDATIONS

The following recommendations can decrease the mortality and morbidity associated with multiple pregnancy.

To make early diagnosis in twin pregnancy.

Antenatal booking with regular antenatal check up should be mandatory.

To reduce the perinatal mortality and morbidity, proper mass education programme, establishment of referral system and early hospitalization at 32-34 weeks.

Labour should always be conducted in a hospital under the presence of an expert obstetrician, paediatrician and anaesthetist, as they are considered high risk pregnancies.

Active efforts should be made to shorten the interval between the delivery of first and second twin.

Prophylactic methylergometrine and oxytocin drip should be given in third stage to prevent PPH.

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