

Evaluation of Complications Associated with Twin Pregnancy

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ABSTRACT

Objective: To describe the various complications encountered in antenatal, intrapartum and postnatal period in patients with twin pregnancy

Study Design: It was a cross sectional survey

Sampling technique: Convenient sampling

Place of study: Department of Obstetrics and Gynecology, Nawaz Sharif Social Security Teaching Hospital, Multan Road ,Lahore.

Methods: All the patients with twin pregnancy during the year 2011 and 2012 were included except those who delivered before 22 weeks of gestation. Percentage of different complications was calculated.

Results: Most of the patients were at extremes of parity either primigravida or grandmultipara. Age of the patients were either < 20 years or >35 years. Most common complication was anemia in 62% cases followed by preterm labour in 59% cases. More than 40% of total preterm deliveries were before 34 weeks of gestation. Incidence of abdominal delivery was 45 %. Most of the babies were less than 2500 grams. In all stages of pregnancy, twins showed increased rate of complications.

Keywords: Twin pregnancy, complications ,preterm labour , anaemia .

INTRODUCTION

The number of twin pregnancies is increasing day by day. The reason for rise in number of twin pregnancies is basically assisted reproduction techniques for example clomiphene citrate, gonadotrophins, in vitro fertilization etc. around one fourth of IVF pregnancies are multiple. This particular obstetric condition requires special attention because it is associated with very high risk of antepartum, intrapartum and postpartum complications, both maternal and fetal. Perinatal morbidity and mortality rate is also many folds higher as compared to single pregnancies. Previously, attention of obstetricians was basically on diagnosis and management of twin pregnancies but now worldwide focus is on early recognition of complications, both maternal and fetal, and their management^{1,2,3}.

MATERIALS AND METHODS

This Cross sectional survey was conducted in department of Obstetrics and gynecology, Nawaz Sharif Social Security Hospital, Multan Road, Lahore from January 2011 to December 2012. A review of hospital record of all twin pregnancy cases during year 2011 and 2012 was carried out. Relevant data

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was collected and analyzed. All the patients presenting with twin pregnancy in year 2011 and 2012. Data is computer based. Percentages of different complications encountered with twin pregnancy during pregnancy, labor and puerperium were calculated. All the patients presenting in antenatal clinics or emergency with twin pregnancy were included while twin pregnancies which delivered before 22 weeks gestation with higher orders multiple pregnancies were excluded from the study.

RESULTS

In year 2011-12, 64 patients presented with twin pregnancy in department of Obstetrics and Gynecology, Nawaz Sharif Social Security Hospital , Multan Road , Lahore. The parity of patients ranged from 1-12 with a mean of 6. (Table 1). The age of patients ranged from 18-36 years with a mean of 27 years (Table 2). In all situations twin pregnancies showed higher chances of complications as compared to single pregnancies (Table 3). The patients with twin pregnancy showed increased chances of having preterm onset of labour with the resultant preterm delivery (Table 4). The twin pregnancies showed higher incidence of abdominal delivery as compared to single pregnancies (Table 5). The incidence of vertex presentation in labour was 77% while that of breech presentation in labor was 20%. Transverse lie in labour showed incidence of 3%. There is many folds increased risk of

complications during intrapartum and postpartum period in patients with twin pregnancy (Table 6). The risk of having low birth weight babies is much higher as compared to single pregnancies basically because of prematurity (Table 7).

Table 1: Parity of patients with twin pregnancy

Parity	=n	%age
1-2	30	47
3	5	8
4	8	12
5 or more	21	33

Table 2: Ages of patients with twin pregnancy

Age	=n	%age
<20	11	17
20-25	20	31
26-30	10	15
31-35	16	25
>35	7	12

Table 3: Antenatal complications with twin pregnancy

Types of complications	%age
Preterm labor<34 wks	59
Anaemia	62
Pregnancy induced hypertension	16
Pre eclampsia	8
I.U.G.R	8
Antepartum haemorrhage	5
Intrauterine death	6
Threatened abortion	5

Table 4: Gestational age at the time of delivery

Gestational age(weeks)	=n	%age
<34	28	44
34-37	18	28
>37	18	28

Table 5: Mode of delivery

Abdominal delivery	%age
Abdominal	45
Vaginal	55

Table 6: Complications in labor and postpartum period

Complications	%age
Cord prolapsed	3
Postpartum haemorrhage	10
Retained second twin	6
Anaemia	60
Fetal distress	5
Shoulder presentation	2

Table 7: Babies weight in grams

Weight in grams	%age
1500	23
1500-2500	44
2500	33

DISCUSSION

The study showed that most of the patients were at extremes of parity. Those with first or second pregnancy were 47% while those in fifth or above pregnancy were 33%. This showed that the risk of having twin pregnancy is higher at extremes of parity¹. Most of the patients were either below 20 years of age (17%) or above 30 years (37%). This signifies that the chance of having twin pregnancy is many folds higher after 30 years of age. Twin pregnancy is associated with higher maternal morbidity as compare to single term pregnancies³.

Most common problem encountered in antenatal period was of anemia effecting 62% of patients. The basic reason was poor socioeconomic conditions, bad dietary habits and lack of awareness about increased demands during twin pregnancies. The study conducted at King Khalid Hospital, Saudi Arabia also showed four folds higher incident of anemia with twin pregnancy¹.

The incident of pregnancy induced hyper tension was 26% which is two to three folds greater than single pregnancies. The study conducted in France in 2000 also confirmed three folds greater risk of pregnancy induced hyper tension with twin pregnancy⁷.

Pre-term labour was another major problem encountered in antenatal period with twin pregnancy (59%). A study conducted in France in March 2000 showed the risk of pre maturity to be 39% with twin pregnancy⁷. This co relates well with our study results. In USA, National Natality files also showed 40% risk of pre maturity with twin pregnancy. In USA, 7% of all severely premature babies(less than 32 weeks of gestation) were twins⁵.

The other major antenatal complication was I.U.G.R (8%) as a result of pregnancy induced hyper tension. Threatened abortion was seen in 5 % of cases. 44% of the babies were delivered before 34 weeks of gestation. The term twin pregnancies were only 28%. Because the higher risk of premature deliveries 67% of the babies born in this study were low birth weight. In study conducted in France in 2000, 48% of the babies were low birth weight⁷. In USA (1991-95) very low birth weight babies were 10 times more common with twin pregnancy than single pregnancies⁸.

In our study, 45% of the patients had abdominal delivery as compare to 25% in single pregnancy. This showed higher risk of caesarean section³. Post-partum hemorrhage was a problem in 10% cases in our study. Cause was mostly uterine atony due to over extended uterus.

Twin pregnancies require proper and more frequent antenatal, intra-partum and post natal care supervised by trained obstetricians so that as much complications could be avoided as possible. Due to lack of resources we were unable to get a probability sample for the whole city or province. However in conclusion it could be said that twin pregnancy is always a high risk case which requires proper assessment of patient during pregnancy, labour and puerperium.

REFERENCE

1. Zainab Ahmad et all. Multiple pregnancy management .Department of Obstetrics Gynaecology Jan 1994: King Khalid University Hospital ,Riyadh.Jan 1994.
2. Twin Pregnancy.Atlanta Maternal Fetal Medicine .Clinical Discussions April 1994:Volume: 2,Number: 4.
3. Senat MV, Aneel PY, Bouvier coll MH Breast G.How does multiple pregnancy, affects maternal mortality and morbidity.Clin.Obstet.Gynaecol 1998:,41,3-11.
4. Kiely J (1998)What is the population based risk of preterm birth among twins and other multiples?Clin.Obstet.Gynaecol 1998:41,3-11.
5. Alexander G, Kogan M,Martin J,Papiernik E.What are the fetal growth patterns of singleton,twins and triplets in United States. Clin. Obstet. Gynaecol 1998; 41,115-25.
6. N.M.Fisk.Multiple pregnancy.Dewhurst's Textbook of Obstetrics and Gynaecology for Postgraduates 1999:298-307.
7. Francois Olivenes.Double Trouble: Yes a twin pregnancy is an adverse outcome.ART Unit,Department of obstetrics and gynaecology,france March 2000.
8. National Natality Files,USA,1991-1995.