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A Case Report on Deep Infiltrating Endometriosis- Endometrioma

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Abstract

Introduction: *The incidence of multiple births has been rising steadily for over past 30 years. The reasons for this trend include advances in reproductive medicine as well as a greater proportion of older pregnant mothers who naturally have a higher incidence of multiple gestations. Twin pregnancies in an unmedical population comprise 1% of all pregnancies, but account for at least 10% of perinatal mortality. Low birth weight and prematurity are the main causes of high perinatal morbidity and mortality in twins, whereas malpresentation and the hazards of delivery are next in order of concern. For these reasons, twin pregnancy is considered a high-risk pregnancy; different aspects of the risk include the mode of delivery, which remains a subject of a controversy and discussion among obstetricians.*

Objectives: *The objective of the study is to:*

- *Compare the fetal and the maternal outcome in booked and emergency cases of twin pregnancy after 24 weeks gestation...*

Design

- *Cohort study*

Setting

- *Department of Obstetrics & Gynaecology, Lahore General Hospital, Lahore, Which is a Teaching/Tertiary Care Unit*

Duration of Study

- *Six months after the approval of synopsis*

Results: *Majority of the patients i.e. 42.7% (n=64) were between 26 -30 years in Group-A and 44.67% (n=67) in Group-B, 26.7%(n=40) were found between 18-25 years and 30.6%(n=46) between 31-36 years in Group-A while 30.67%(n=46) were found between 18-25 years and 24.6%(n=37) between 31-36 years in Group-B, mean age was found to 27.34+1.75 in Group-A and 26.99+1.21 in Group-B.*

Antepartum haemorrhage was found in 6.7% in Group-A while 14.7%(n=22) in Group-B. Regarding the mode of delivery, 13.3%(n=20) cesarean section in Group-A and in Group-B it was found as 43.3%(n=65) which is significantly higher.

With regards to perinatal mortality in both groups, only 4%(n=6) were found with perinatal mortality while 20%(n=30) were founding in Group-B it was also significantly higher. In Group-A, only 32.7%(n-49) neonates were transferred to nursery while in Group-B 68%(n=102) shifted to nursery.

***Key Words**: Twin pregnancy, perinatal and maternal outcome, booked and unbooked cases, mode of delivery.*

Introduction

The incidence of multiple births has been rising steadily for over past 30 years. The reasons for this trend include advances in reproductive medicine as well as a greater proportion of older pregnant mothers who naturally have a higher incidence of multiple gestations. Twin pregnancies in an unmedical population comprise 1% of all pregnancies, but account for at least 10% of perinatal mortality.**[**1,2**]** The individual twin's risk of perinatal death is at least three times that of a singleton, and the incidence of stillbirth is twice that of singletons.**[**3,4**]**

Twin gestations have a large impact on perinatal complications, as these pregnancies account for a disproportionate share of adverse obstetric and neonatal outcomes. The most common and profound implication is preterm delivery (< 37 weeks of gestation), presently the leading cause of hospitalization among pregnant women and the second leading cause of infant death.**[**5**]** Prematurity and low birth weights are the main causes of high perinatal morbidity and mortality in twins.**[**6**]** In addition multiple pregnancies have been associated with a greater number of other problems for both mother and infant including high rates of hypertensive disorders, placental abruption, operative delivery, low birth weight and cerebral palsy.**[**7**]**

Planned cesarean section may reduce the risk of perinatal death of twins at term by approximately 75% compared with attempting vaginal birth.**[**8**]** This is principally due to reducing the risk of the second twin due to intrapartum anoxia.**[**9**]**

Undiagnosed twin pregnancy imposes unnecessary risk for the mother and fetuses. Management of twin pregnancy is effective when the diagnosis has been made early in gestation. Therefore, regular antenatal visits have great importance. In various studies done in Pakistan showed that Antepartum Haemorrhage (APH) occurred more frequently in unbooked patients (15.28% v/s 6.45%). Cesarean section done in 33.33% in booked cases. Similarly admission to nursery require in 67.78% v/s 32.29%.**[**10**]**

Considering all these factors, the health and management of twins as well as the management of twin pregnancies remain a challenge for the obstetricians.

Objective of the Study

The objective of this study is to:

- Compare the fetal and the maternal outcome in booked and emergency cases of twin pregnancy after 24 weeks gestation.

Materials & Methods

Study design:

- Cohort study

Setting:

- Department of Obstetrics & Gynaecology, Lahore General Hospital, Lahore, which is a teaching/tertiary care unit

Duration of study:

- Six months after approval of synopsis.

Sample size:

- Sample size of 300 cases; 150 in each group with 80% power of test, 5% significance level and taking expected percentage of APH in unbooked vs booked cases i.e. 15.38% and 6.45%.

Sampling technique:

- Non probability: Purposive sampling

Sample selection:

Inclusion Criteria

- All patients with twin pregnancy after 24 weeks gestation both booked (who had at least three antenatal visits) and emergency cases (who present first time through emergency). Age range between 18-36 years.

Exclusion Criteria:

- Twin pregnancy with previous cesarean section
- Twin pregnancy with any chronic disease (lung and hear disease) assessed by history and investigations
- Twin pregnancy with intrauterine fetal demise or congenital anomalies. Assessed by history and ultrasound

Data collection procedure:

- Three hundred cases of twin pregnancy, which fulfill inclusion criteria, were selected from Labour Room or Emergency. There were 150 booked cases, which called Group-A. One hundred and fifty unbooked cases were selected from Emergency and were labeled as Group-B.
- The data collected was included detailed history, including demographic, obstetric and history of presenting illness.
- Examination included general physical examination, per abdominal and per vaginal examination. All patients were managed according to hospital protocol and all relevant information were collected in proforma (attached herewith).
- Maternal outcome such as antepartum hemorrhage and mode of delivery was recorded. Fetal outcome such as perinatal mortality and shifting to neonatal intensive care unit was recorded in both groups.

Data analysis:

The data was entered into SPSS version 10 and analyzed. Descriptive statistics were calculated. The age was presented as Mean ± SD. Qualitative variables like maternal outcome such as antepartum haemorrhage and mode of delivery like cesarean section. Fetal outcome such as perinatal mortality and shifting to neonatal intensive care unit was presented as frequency and percentages. Fetomaternal outcomes were compared in both groups through chi-square test, p value ≤ 0.05 was considered as significant.

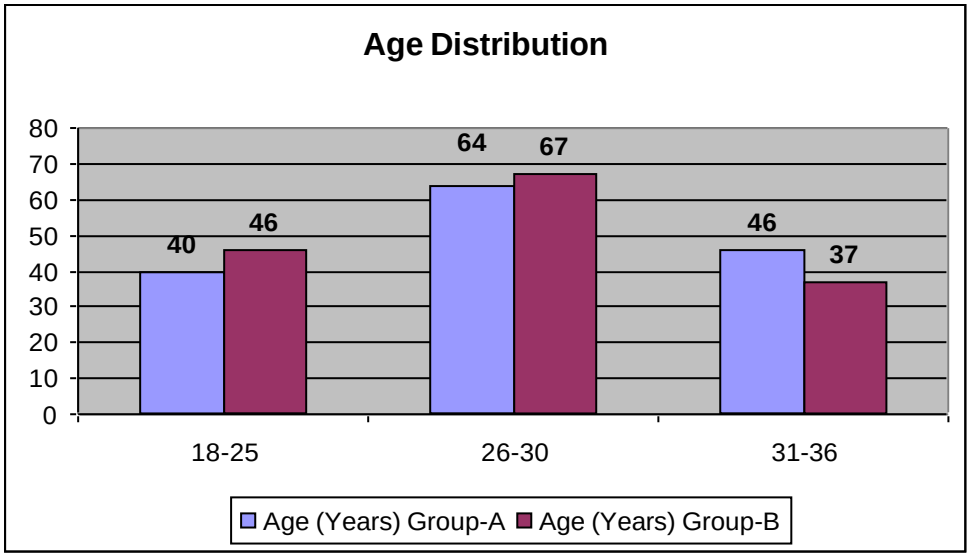
Results

A total of 300 patients fulfilling inclusion/exclusion criteria were studied to compare the fetal and the maternal outcome in booked and emergency cases of twin pregnancy after 24 weeks gestation. The data was collected by a specially designed proforma (Annexure-1) and then analyzed through SPSS Version 10.

While studying the distribution of cases by age it was found that majority of the patients i.e. 42.7% (n=64) were between 26-30 years in Group-A and 44.67% (n=67) in Group-B, 26.7%(n=40) were found between 18-25 years and 30.6%(n=46) between 31-36 years in Group-A while 30.67%(n=46) were found between 18-25 years and 24.6%(n=37) between 31-36 years in Group-B, mean age was found to 27.34+1.75 in Group-A and 26.99+1.21 in Group-B. (Table-1).

Age (Years)	**Group-A Booked cases n=150**		**Group-B Un-booked cases n=150**	
	No. of patients	**%age**	**No. of patients**	**%age**
18-25	40	26.7	46	30.67
26-30	64	42.7	67	44.67
31-36	46	30.6	37	24.6
Total	**150**	**100**	**150**	**100**
Mean ± S.D.	**27.34±1.75**		**26.99±1.21**	

TABLE No. 1 AGE DISTRIBUTION

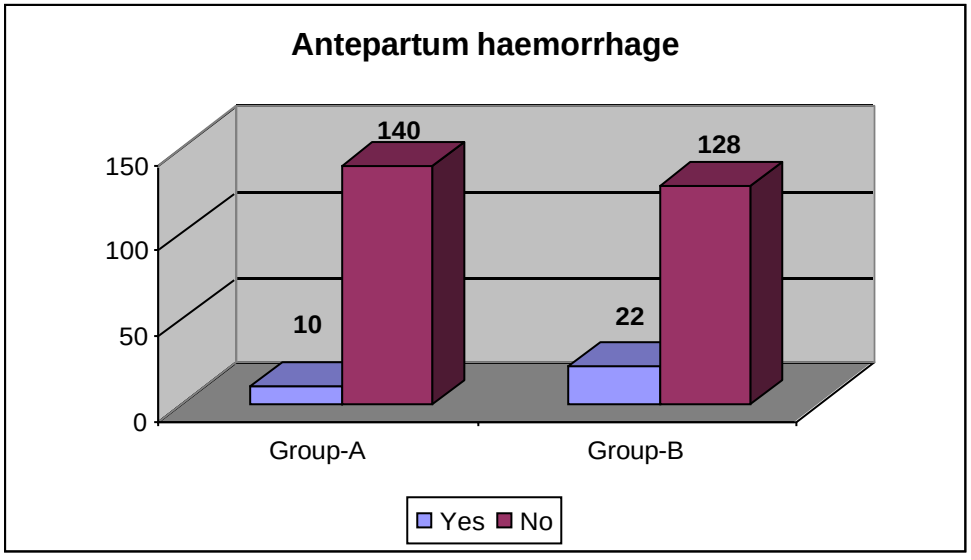


Antepartum haemorrhage was found in 6.7% in Group-A while 14.7%(n=22) in Group-B. (Table 2).

Antepartum haemorrhage	Group-A Booked cases n=150		Group-B Un-booked cases n=150	
	No. of patients	%age	No. of patients	%age
Yes	10	6.7	22	14.7
No	140	93.3	128	85.3
Total	**150**	**100**	**150**	**100**

P. Value= <0.05(0.019)

TABLE No. 2 MATERNAL OUTCOME (Antepartum haemorrhage)



In this study, I recorded the mode of delivery also and found 13.3%(n=20) cesarean section in Group-A and in Group-B it was found as 43.3%(n=65) which is significantly higher. (Table 3).

Cesarean Section	Group-A Booked casesn=150		Group-B Un-booked casesn=150	
	No. of patients	%age	No. of patients	%age
Yes	20	13.3	65	43.3
No	130	86.7	85	56.7
Total	**150**	**100**	**150**	**100**

P. Value= <0.05(0.000)

Table no. 3 Mode of delivery

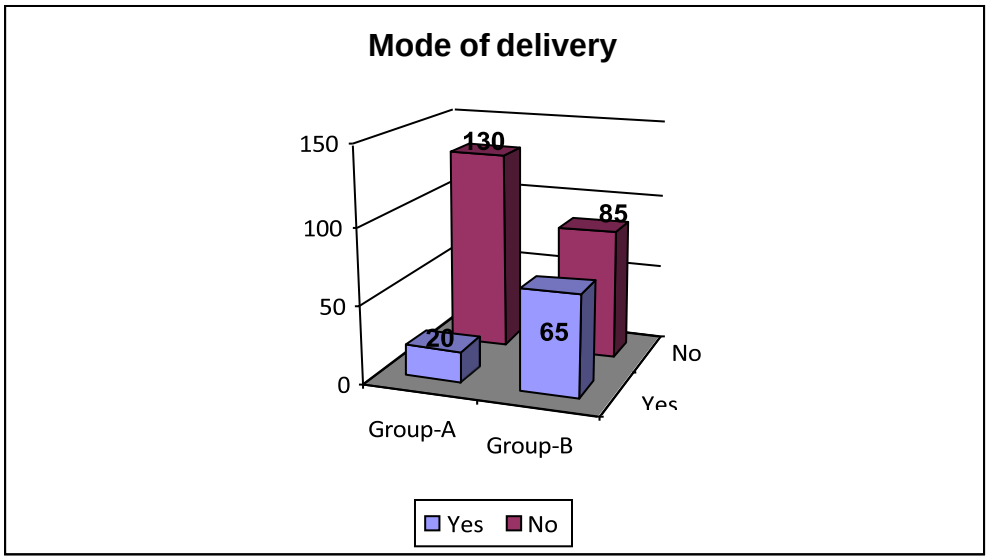
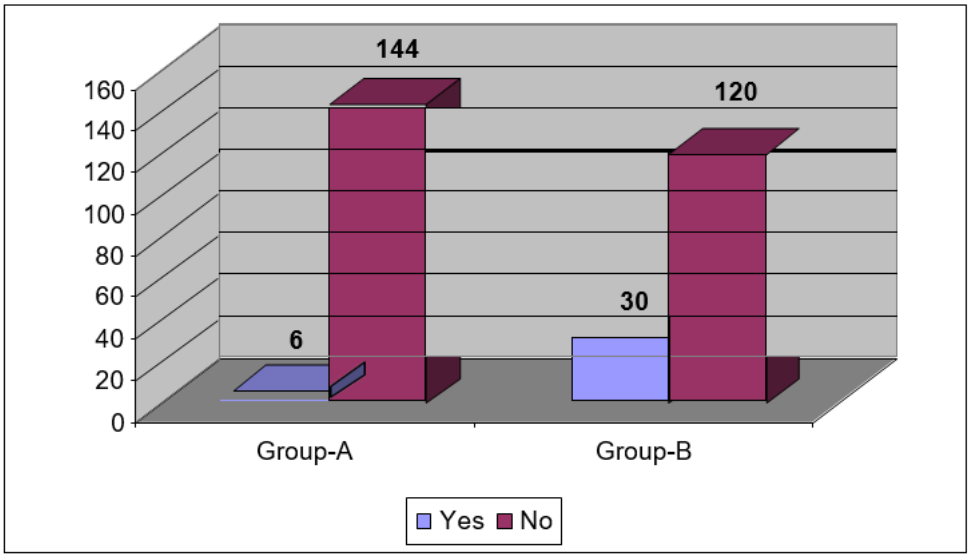


Table No. 4 shows the perinatal mortality in both groups, where only 4%(n=6) were found with perinatal mortality while 20%(n=30) were founding in Group-B it was also significantly higher.

Perinatal mortality	Group-A Booked casesn=150		Group-B Un-booked casesn=150	
	No. of patients	%age	No. of patients	%age
Yes	6	4	30	20
No	144	96	120	80
Total	**150**	**100**	**150**	**100**

P. Value= <0.05(0.000)

TABLE No. 4 Perinatal Mortality

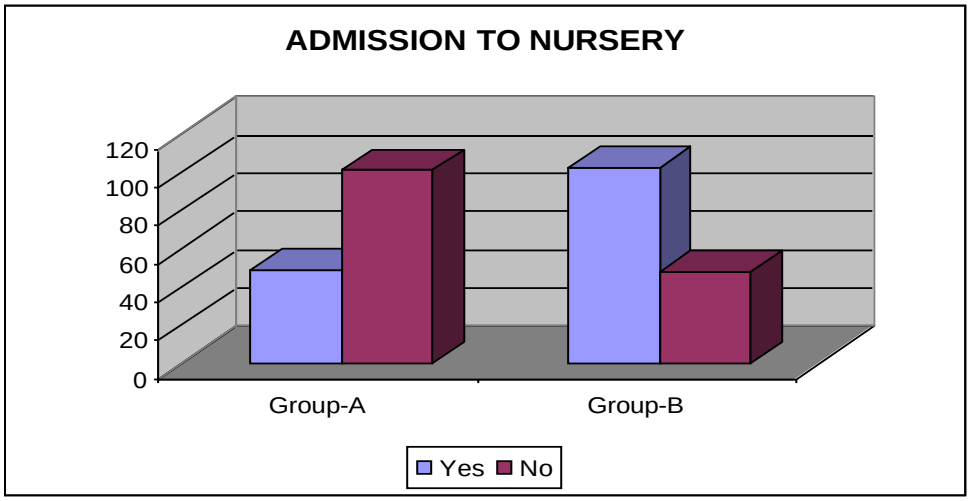


In Group-A, only 32.7%(n-49) neonates were transferred to nursery while in Group-B 68%(n=102) shifted to nursery. (Table No. 5)

Admission to nursery	Group-A Booked casesn=150		Group-B Un-booked casesn=150	
	No. of patients	%age	No. of patients	%age
Yes	49	32.7	102	68
No	101	67.3	48	32
Total	**150**	**100**	**150**	**100**

P. Value= <0.05(0.000)

TABLE No. 5 ADMISSION TO NURSERY



Discussion

Throughout the world, the prevalence of twin births varies considerably, between 2-20 per 1000 birth.[119] The trend of incidence of multiple gestation has increased. In the United States, between 1980 and 1996, the twin gestation rate increased by 47%.[120] This dramatic rising in multiple gestation, especially in higher order multiple gestation, has been attributed to the increase use of ovulation inducing agents, use of assisted reproductive technologies, and a shift toward bearing children at older maternal ages when multiple gestation are more likely to occur naturally.[121] Multiple pregnancies are recognized as high risk pregnancy, associated with increased incidence of adverse pregnancy outcomes and risk for both maternal and fetal morbidity and mortality.[122]

Assessment of amnionicity and chorionicity of a multifetal gestation is important, because multifetal pregnancies have an increased incidence of complications. Among the problems are preterm labor and delivery, placental complications, intrauterine growth restriction, and malformations. Complications specific to monoamniotic pregnancies are twin-to-twin transfusion, cord entanglement leading to complete cutoff of the fetal circulation, and various degrees of conjoined twins. It is therefore imperative to be able to determine the existence of twins.

By 5 weeks gestation, the number of gestational sacs within the uterus can be accurately counted. This "chorionic sac count" unfortunately is only the beginning of the diagnostic process and will predict only the chorionicity of the multifetal pregnancy. The determination of the exact number of fetuses has to wait until the sixth menstrual week; the number of embryos may be determined by the number of embryonic heartbeats. At or after 8 weeks, it is possible and also mandatory to detect the amnion within the chorionic cavity. Usually, the content of the amniotic sac is sonolucent as opposed to that of the extra-embryonic coelom of the chorion, which is filled with low-level echoes (and also contains the yolk sac). The detection of the individual amniotic sacs in the case of a monochorionic-diamniotic twin situation becomes possible at 7.5 weeks or immediately thereafter because the amnion separates from the embryo and is easily imaged.[123]

The main theoretical advantages of early pregnancy screening are more accurate calculation of gestational age, earlier identification of multiple pregnancies, and diagnosis of non-viable pregnancies and certain fetal malformations. However, the quality of ultrasound imaging is dependent not only on the technical capabilities of the ultrasound equipment but also on the experience and expertise of the operator, and standards are variable.

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