

## To Evaluate The Maternal Risk of Twin Pregnancy.

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### ABSTRACT

#### Abstract

**Introduction:-** Twin pregnancy occurs when two fetuses implant within the endometrium. There has ensued sudden increase in the incidence due to discovery of new methodologies by the latest machinery. Assisted Reproductive Technology (ART) is the better example in this regard. On its contrary, twin pregnancy has also resulted into multiple complications for mother and baby both. Both can enter into perilous situations owing to these complications. These are all dependent on the predisposing factors viz race, increased maternal age and parity, weight of mother and number of previous twin pregnancies.

**Aims and objective:-** The aim is to evaluate the risk factors of twin pregnancies for mother only.

**Material and methods:-** The study was done in Department of Gyn/Obs Unit 2 at PMCH Nawabshah from January 2018 to July 2019. This is a cross sectional study. Only pregnant ladies from 18 years to 50 years were selected for the study having the twin pregnancies diagnosed on ultrasound. Patients with single baby were excluded from the criterion. Patients above 50 years were also not the part of our study.

**Results:-** Total 90 patients were taken for the study. Out of them, 32 (35.55%) were found to have twin pregnancy. Age difference was also among patients. Only 9 (28.12%) were aged from 18-30 years whereas 22 (68.75%) had age ranged from 31-45 years and only 1 (3.12%) were of age from 46 to 50 years. Twin pregnancy poses great threat to mother's life. 01(3.12%) patients come with complain of gestational hypertension and 05 (15.62%) suffered from gestational diabetes. Ante-partum Hemorrhage was found in 01(3.12%) patient whereas postpartum hemorrhage was seen in 05(15.62%). Anemia was positive in 20 (62.5%). 02 (6.24%) patients developed dyspnea. None was found with gestational thrombocytopenia. 05(15.62%) patients had undergone miscarriage. 17 (53.21%) were operated for caesarean section.

**Conclusion:-** It is concluded that twin pregnancies pose threat of complications but these can be managed early by taking effective steps.

**Key Words:-** Fetus, Implant, Endometrium, ART, Parity.

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### INTRODUCTION

Twin pregnancy is defined as the implantation of two fetuses within the endometrial lining of the uterus. Their occurrence was found to be lower previously and was about 1 to 2.5% of entire pregnancies recorded in the world.<sup>1</sup> But the recent picture in this regard is reverse and is found to be increasing after 7<sup>th</sup> decade of 20<sup>th</sup> century due to multiple reasons. One is the increase in maternal age and another is the invention of new technologies.<sup>2</sup>

Assisted Reproductive Technology (ART) like multiple embryo transfer or ovarian stimulation has enormously enhanced the number of multiple gestations. These are artificially produced high risk pregnancies that should be avoided because treatment modalities are markedly different.<sup>3</sup>

Twin pregnancies have risks of developing complications for mother as well as baby.

The maternal complications are fatal and pose mother to death. Predisposing factors incorporates race, diet, familial predisposition, increased maternal age and parity, maternal height and weight, previous twin pregnancies and post caesarean early pregnancy after long term use of oral contraceptive.<sup>4,5</sup>

Twin pregnancies have global variation with respect to race. The lowest is found in Asia particularly in Japan while the highest is noted in Western Nigeria. The increased maternal mortality is found in our region due to twin pregnancies.<sup>6</sup>

The clinical importance of twin pregnancies lies in fact that it has more complications and documented complications are six fold more hospital admissions of twin pregnant women as compared to singletons. These complications include vomiting, gestational diabetes mellitus, hypertension related to pregnancy, pre term deliveries, anemia, caesarean section, antepartum and postpartum hemorrhage.<sup>7</sup>

Multiple pregnancies are prone to cause high blood pressure. It develops earlier and complicates as pregnancy advances. Later on it causes the disruption of placenta called placental abruption. Another complication that pregnant women with multiple fetuses can develop is the diabetes mellitus.<sup>8</sup> Anemia is twice common among multiple pregnancies. Miscarriage also occurs in these cases and is common in first trimester. Patient commonly present with bleeding that could be life threatening. The risk of pregnancy loss is increased in last trimesters. Amniotic fluids are abnormal in twin pregnancies. The chances of operative delivery are more among multiple pregnancies. Cord entanglement

occurs in third trimester in twin pregnancies.<sup>9,10</sup>

The rationale of our study is evaluate the complications of twin pregnancies so that they may be detected early and managed early to save the life of mother as well fetus.

#### **Material and Methods:-**

This study was done in Department of Gyn/Obs Unit 2 at PMCH Nawabshah. This is a cross sectional study done from January 2018 to July 2019. Total 32 patients were included in this study. All the patients were taken from OPD and Emergency department of PMCH Nawabshah.

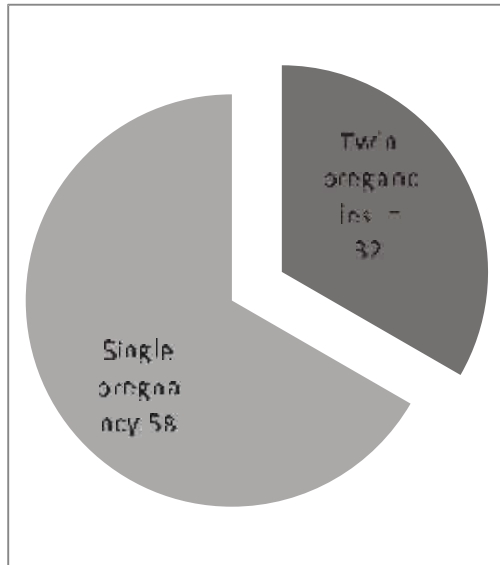
Only pregnant ladies from 18 years to 50 years were selected for the study having the twin pregnancies diagnosed on ultrasound. Patients with single baby were excluded from the criterion. Patients above 50 years were also not the part of our study.

A complete detailed history and clinical examination was done in addition to routine blood investigations. All these patients were undergone for ultrasound for multiple times. Ultrasound findings were noted from the 1<sup>st</sup> trimester till the reaching of full term. Per vaginal examination was also in perinatal visits whenever required.

#### **RESULTS:-**

Total 90 patients were taken for the study. Out of them, 32 were found to have twin pregnancy as is shown below Figure 1.

Age difference was also among patients. Only 9 (28.12%) were aged from 18-30 years whereas 22 (68.75%) had age ranged from 31-45 years and only 1 (3.12%) were of age from 46 to 50 years as is shown in table 1 below.

**TABLE 1-AGE DIFERENCE**

S.no:	Years	No of patients	Percentage
1	18-30	09	28.12%
2	31-45	22	68.75%
3	46-50	01	3.12%
Total		32	100%

Twin pregnancy poses great threat to mother's life. 01(3.12%) patients come with complain of gestational hypertension and 05 (15.62%) suffered from gestational diabetes. Ante-partum Hemorrhage was found in 01(3.12%) patient whereas postpartum hemorrhage was seen in 05(15.62%). Anemia was positive in 20 (62.5%). 02 (6.24%) patients developed dyspnea. None was found with gestational thrombocytopenia. 05(15.62%) patients had undergone miscarriage. 17 (53.21%) were operated for caesarean section.

**Table 2 Complications Of Twin Pregnancy**

S.no:	Complications	No of patients	Percentage
1	Gestational Hypertension	01	3.12%
2	Gestational Diabetes	5	15.62%
3	Antepartum Hemorrhage	01	3.12%
4	Post partum Hemorrhage	05	15.62%
5	Anemia	20	62.5%
6	Dyspnea	02	6.24%
7	Gestational Thrombocytopenia	00	00
8	Miscarriage	05	15.62%
9	Caesarean Section	17	53.12%

**DISCUSSION**

Multiple pregnancies incidence has dramatically increased due to increased age of mothers and also posed threat to life of mothers and babies as well. Multiparous women have more incidences as compared to nulliparous ones.<sup>11</sup>

In a study of 3675 deliveries, 53 (1.4%) had twin pregnancies during a period of 2 years. But in our study, the incidence was 35.75%. In another study, 64.25 women were multiparous and 35.8% were primi. Same was found in our study. In a study, the age of most of patients was between 22-29 (67.9%) years. Another study showed that the mean age of twin pregnancies was 30.9 years but in our study, the age difference was altogether different. It was between 31-45 (68.7%) years.<sup>12</sup>

A study showed that anemia was in 19(35.8%) patients. But in our study anemia was found to be present in 20 (62.5%) patients. In another study, hypertension was found to be in 12 (22.6%) patients. But in our study, it was

noted in 3.12% patients only. In another study, PPH was found in 10 (18.9%) patients. In our study, PPH was found in 15.62%. In a study, APH was in 3 (5.7%) patients. In our study, 3.12% was to be suffered from APH. In a study, gestational diabetes was found in 5.7% but in our study, it was noted to be present among 15.62%. A study showed no any maternal death and same was found in our study. The incidence of caesarean section was 3.8% but in our study, operative delivery was found among 53% patients.<sup>13</sup>

Dubey S et al reported that physiological anemia is found in multiple pregnancies and high incidence of hypertensive disorders of pregnancy was observed during this study. This entire enhances the chances of developing pulmonary edema in multiple pregnancies resulting in increase in maternal morbidity and mortality.<sup>14</sup>

Buhling et al reported the higher incidence of APH with placenta previa along with toxemic abruption in twin pregnancy. Henceforth, specialized antenatal care is advocated in multiple pregnancies to improve the maternal and fetal outcome.<sup>15,16</sup>

### **Conclusion**

It is concluded that the maternal pregnancies are if not managed early can pose threat to life of patients so it is necessary to evaluate the risks of twin pregnancies in mothers.

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