

## Occurrence of Diabetes with Hypertension during Pregnancy

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**Abstract: Objective:** To study the occurrence of diabetes and hypertension in pregnancy. **Material & methods:** It was observational study and conducted at Gynecology & Obstetrics Department. Process of collection of data was proforma was got in which there, parity, gestational age and gestational age when gestation converted hypertension diagnosis, concerning diabetes, age, BMI and history of pregnancy induced hypertension were noted. **Results:** In this study 120 pregnant ladies were involved in age range was 25-42 years, 20% were obese, and 60% of induced hypertension and 40% were diabetes. **Conclusion:** It is concluded that the high rate of morbidity and mortality among mothers and newborns may, in part, as of increased occurrence of diabetes with hypertension.

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**Keywords:** Pregnancy, hypertension, diabetes

### 1. Introduction

Placenta is an important organ for development of fetus [1, 2]. Fetal membranes chorion and amnion cover the placenta [3]. Common pathologies of pregnancy like intrauterine growth retardation, preeclampsia (pregnancy induced hypertension), are associated with incomplete vascular remodeling in the placenta [4-6]. It is a medical problem, when pregnancy is complicated by diabetes and or hypertension which affect maternal health, architecture and functions of the placenta may even jeopardize the fetal normalcy. The placenta, connected amongst maternal fetal movements, reflected as a frame by which maternal disorders and their effects on fetal well-being can be understood [6]. Placental examination is of severe assessment not only in collecting information regarding etiologies, consequences and managing of the pathological systems disturbing pregnancy, then similarly in improving the management in subsequent gestations [7, 8]. The morphology of placenta is necessary for transferring oxygen and nutrients to fetus and excluding carbon dioxide and waste products. Gestational diabetes and hypertension cause devastation to structure placental and alter its functions being the major contributors to insufficiency of placenta [9, 10].

Hypertension and diabetes are communal in smaller socioeconomic clusters. [11, 12].

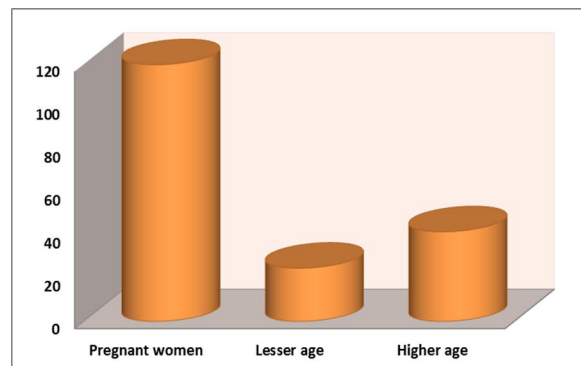
This case report was done to detect the variations in the placenta of a mother (a primigravida) with PIH and gestational diabetes. The objective of study was to study the occurrence of diabetes with hypertension during pregnancy.

### 2. Materials And Methods

It was an observational study and conducted at Gynecology & Obstetrics Department from 10th January 2013 – 10th January 2014. Process of collection of data was proforma and the printed informed consent was got in which there, parity, gestational age and gestational age when gestation converted hypertension diagnosis, concerning diabetes, age, BMI and history of pregnancy induced hypertension were noted.

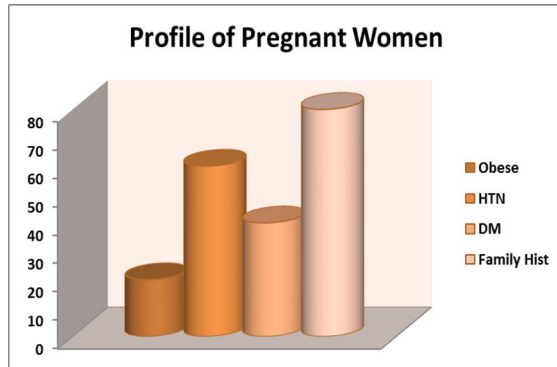
All the pregnant women with hypertension and diabetes during pregnancy were included. The data was analyzed using SPSS version 16.0.

### 3. Results & Discussion



**Fig:1 shows the demographic profile of pregnant women**

In the present study, 120 pregnant women were involved in age range by 25-42 years, 20% were obese, and 60% of induced hypertension and 40% were diabetes. (Fig: 1-2).



**Fig:2 shows the BMI, Obese, Diabetes, Hypertension and History of pregnant women**

The Complications of pregnancy such as hypertension and diabetes are replicated in the placenta in a substantial mode [13]. Complications of diabetes of pregnancies are communal than prevailing diabetes. Pregnancy-induced hypertension is a type of high blood pressure occurring in pregnancy.

There is the correlation of pregnancy-induced hypertension with fetal growth obstruction [14] with increasing age, BMI and parity [15].

It was described that higher age of the women [16] had noticed a contrary correlation among the GDM of the pregnant woman and it was also noticed in alternative study that increased rate of lesser age women had observed towards interrelated with reduced risks of GDM [17].

In another study, there was a description the associations between youngsters with diabetes and contrary consequences in pregnant women. [18]. High parity also connected peril aspect for diabetes with hypertension. [19]

In our study, it was not noticed that history of diabetes with hypertension to correlate with higher chances of progression GDM [20].

In our study, occurrence of diabetes with hypertension during pregnancy was found towards correlated with age, BMI and history of diabetes with hypertension.

### Conclusion

It is concluded that the high level of morbidity and mortality among mothers and newborns may, in part, be of increased occurrence of diabetes with hypertension. Consequently it's endorsed that proper managing strategy may articulate to endorse enhanced implications during pregnancy.

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