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**SECTION 20. Medicine.** 





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# FREQUENCY OF HYPERTENSIVE DISORDERS AMONG PREGNANT LADIES

Abstract: Objective: Purpose of this study was to observe hypertension among pregnant ladies.

Design and Duration: This is across sectional study of observational type. Study was conducted in January 2018 and completed in October 2018, comprising on 10 months duration.

Setting: Study was conducted in gynecology and obstetrics ward of Indus hospital Lahore.

Patients and Methods: An inclusion and exclusion criteria was formed. Patients in this study were selected on the basis of inclusion criteria, according to which those patients were selected who developed hypertension after 20th week of gestation and those, who developed hypertension and fits within 10 days after delivery. According to exclusion criteria, patients having any other metabolic disease or developed hypertension and fits after 10 days of delivery were not included in this study. Proper written consent was taken from all cases included in this study and which cases did not give consent, were excluded from the study. Permission was taken from the ethical committee of study institution for conducting research work. Data was documented properly and analyzed on Microsoft office and SPSS softwares and presented in the form of percentages and frequencies expressed in tables and graphs.

Results: There were total 305 cases in this study having eclampsia and out of which 150 cases developed hypertensive disorders. There were 85(27.8%) cases between 20-25 years age, 97(31.8%) cases between 25-30 years, 73(24%) cases were having age between 31-35 years and 50(16.4%) cases were above 35 years of age. Out of 305 cases, 170(55.7%) patients developed eclempsia in antepartum period, 105(34.4%) in intrapartum period and 30(9.8%) in post partum period. Most common complication developed due to eclempsia was post partum hemorrhage.

Conclusion: Eclempsia is a very common problem among most of the pregnant ladies which causes various complications such as post partum hemorrhage, acute renal failure and acute respiratory distress syndrome.

Key words: Eclempsia, hypertensive disorders, pregnant ladies, Fits during pregnancy.

Language: English

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#### Introduction

Eclempsia is a hypertensive disorder very common among pregnant ladies. It is associated with fits, renal failure, abruption placenta, cardio vascular pulmory embolism, blindness disease, myocardial infarction etc. Hypertension most commonly occurs during antepartum period.

According to a report its prevalence is 5-8% among pregnant ladies in Pakistan. Hypertension due to pregnancy occurs after 20<sup>th</sup> week of gestation while chronic hypertension is already present. In pregnancy physiological changes occur. Blood pressure usually decreases in pregnancy but in eclempsia it is raised. Most of the times it is undiagnosed during pregnancy



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and it is diagnosed after delivery usually. Eclempsia occurs from 20th week of pregnancy till first week after delivery. Hypertension may cause maternal or fetal morbidity and mortality. It involves all body systems. There are many other factors as well which contribute to maternal and fetal morbidity and mortality such as illiteracy, low socioeconomic status, poor health facilities, lack of skills and multiparity. There is need of proper fetomaternal healthcare centers to diagnose pregnancy related complications in early stages so that proper treatment may be given. Such pregnancies are high risk and often cesarean section is needed as there is high chances of placenta previa, obstructed labour or breech delivery. These newborns are usually premature and may need neonatal ICU care and ventilator support.

#### **Patients and Methods**

An inclusion and exclusion criteria was formed. Patients in this study were selected on the basis of This is a cross sectional study of observational type which was conducted in a tertiary care hospital Indus hospital located in Lahore, a city in Pakistan. Study was completed in duration of 10 months. inclusion criteria, according to which those patients were selected who developed hypertension after 20th week of gestation and those, who developed hypertension and fits within 10 days after delivery. According to exclusion criteria, patients having any other metabolic disease or developed hypertension and fits after 10 days of delivery were not included in this study. Proper written consent was taken from all

cases included in this study and which cases did not give consent, were excluded from the study. Permission was taken from the ethical committee of study institution for conducting research work. Data was documented properly and analyzed on Microsoft office and SPSS softwares and presented in the form of percentages and frequencies expressed in tables and graphs. During study period 910 cases were admitted in the ward out of which 305 developed eclempsia and all other were having normal blood pressure. All necessary investigations were done to rule out complications related to eclempsia.

#### Results

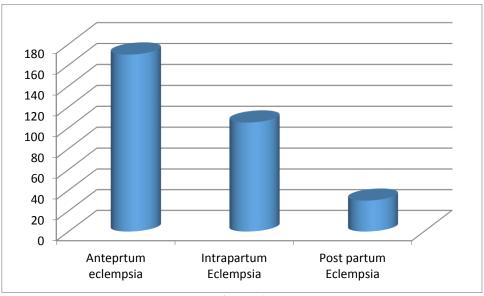
Out of 910 cases admitted in Gynae ward of the study hospital 305 were included in this study. There were total 305 cases in this study having eclampsia and out of which 150 cases developed hypertensive disorders. There were 85(27.8%) cases between 20-25 years age, 97(31.8%) cases between 25-30 years, 73(24%) cases were having age between 31-35 years and 50(16.4%) cases were above 35 years of age. Out of 305 cases, 170(55.7%) patients developed eclempsia in antepartum period, 105(34.4%) in intrapartum period and 30(9.8%) in post partum period. Most common complication developed due to eclempsia was post partum hemorrhage. Disseminated intravascular coagulation was seen in 35(11.5%), PPH in 25(8.2%) cases, acute renal failure in 12(4%), cerebrovascular accidents in 7(2.3%), infection in 13(4.3%), pulmonary edema in 10(3.3%) and blindness in 5(1.6%) cases was reported.

Table 1.

Eclempsia related complications	Number of patients (N)	%
DIC	35	11.4
Post partum hemorrhage	25	8.2
Placenta abruptia	16	5.2
HEELP syndrome	14	4.6
Acute renal failure	12	4
Cerebro vascular accidents	7	2.3
ARDS	6	2
Infection	13	4.3
Pulmonary edema	10	3.3
Blindness	5	1.6
Myocardial ischemia	7	2.3
Total	150	100



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Picture 1.

#### Discussion

Eclempsia Is a very common problem among pregnant ladies in Pakistan. It is less frequent in developed countries like America and UK. Developed countries have well developed health system and that is why such cases are diagnosed in early stages before development of complications in mothers or fetus. It is associated with fits, renal failure, abruption placenta, cardio vascular disease, pulmory embolism, blindness and myocardial infarction etc. Hypertension most commonly occurs during antepartum period. According to a report its prevalence is 5-8% among pregnant ladies in Pakistan. Hypertension due to pregnancy occurs after 20<sup>th</sup> week of gestation while chronic hypertension is already present. In pregnancy physiological changes occur. Blood pressure usually decreases in pregnancy but in eclempsia it is raised. Most of the times it is undiagnosed during pregnancy and it is diagnosed after delivery usually. Eclempsia occurs from 20th week of pregnancy till first week after delivery. Hypertension may cause maternal or fetal morbidity and mortality. It involves all body systems. Out of 910 cases admitted in Gynae ward of the study hospital 305 were included in this study. There were total 305 cases in this study having eclampsia and out of which 150 cases developed hypertensive disorders. There were 85(27.8%) cases between 20-25 years age, 97(31.8%) cases between 25-30 years, 73(24%) cases were having age between 31-35 years and 50(16.4%) cases were above 35 years of age. An inclusion and exclusion criteria was formed. Patients in this study were selected on the basis of This is a cross sectional study of observational type which was conducted in a tertiary care hospital Indus hospital

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#### Conclusion

Eclempsia is a major risk factor of maternal and fetal mortality. If diagnosed in early pregnancy and proper treatment given, complications can be reduced. Delivery should be conducted in a hospital with having all necessary fascilties required such as neonatal ICU with ventilator support etc. Prevention of hypertensive disorders during pregnancy can reduce many complications and make pregnancy safe.



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