



COMPARISON OF MATERNAL OUTCOME IN EARLY ONSET VERSUS LATE ONSET PREECLAMPSIA AT TERTIARY CARE CENTRE.

Obstetrics & Gynaecology

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ABSTRACT

Background: Hypertensive disorders of pregnancy are an important cause of maternal morbidity and mortality, perinatal morbidity and mortality
Aims and objectives: to compare maternal outcome in early onset preeclampsia versus late onset preeclampsia
Material and methods: It is a prospective observational study at GIMS tertiary centre from January 2021 to June 2022. A total of 400 pregnant women were studied. 100 among EOPE and 300 among LOPE. Clinical outcome were studied in terms of mode of delivery and antepartum and postpartum complications.
Results: We found that 18% of the group 1 and 22.7% of group 2 participants had eclampsia and 19% of the group 1 and 25.3% of group 2 participants had Abruptio placenta. The most common postpartum complications among group 1 patients were HELLP syndrome (10%) followed by Eclampsia (6%) and among group 2 patients was PPH (16.3%). There was 1 maternal mortality
Conclusion: women with early onset PE had severe complications throughout the course of their illness.

KEYWORDS

hypertension, Maternal outcome, preeclampsia, early onset and late onset

INTRODUCTION

Hypertensive disorders of pregnancy are an important cause of maternal morbidity and mortality, perinatal morbidity and mortality. It is reported to be the second most common cause of maternal death worldwide. Globally, incidence of hypertensive disorders in pregnancy is about 5-10%. Data collected from the National Eclampsia Registry (NER) of India shows the incidence of hypertensive disorders in pregnancy as 10.08%.¹

Preeclampsia is defined as systolic blood pressure >140mmHg or diastolic blood pressure >90mmHg measured on at least 2 occasions 6 hours apart, and proteinuria (excretion of >0.3g/day) measured after 20th week of pregnancy in previously normotensive and nonproteinuric women.²

Based on the period of gestation at which first onset of the disease occurred Preeclampsia can be classified into Early onset preeclampsia (EO-PE) is that which develops before 34 weeks of gestation and Late onset preeclampsia (LO-PE) is that which develops at or after 34 weeks of gestation.³

The complications of preeclampsia are eclampsia, abruption placentae, renal failure, pulmonary edema and Disseminated intravascular coagulation, sepsis, maternal death.

Early onset preeclampsia in particular confers a higher risk of maternal and foetal complication⁴

MATERIALS AND METHODS:

Study carried out in the department of obstetrics and gynecology at GIMS, Gadag over a period of 18 months. Study subjects are pregnant women >20 weeks and <42 weeks of gestation attending labor room with BP > 140/90mmHg on 2 occasions measured 6 hours apart with proteinuria. Based on the department statistics, 100 women in early onset preeclampsia and 300 women in late onset preeclampsia were included.

Inclusion Criteria :

- Patients booked in the first trimester with known first trimester Blood Pressure record
- Pregnant woman between 20-42 weeks of gestation
- Blood pressure >140mm of Hg systolic and > 90mmHg diastolic with proteinuria diagnostic of preeclampsia.
- Women willing to deliver in this hospital.

Exclusion Criteria:

- Gestational age <20 weeks or >42 week.
- Pregnant women with known medical disorder (essential hypertension, kidney disease)

RESULTS

The mean gestational age among group 1 was 30.63±2.9 weeks and among group 2 was 37.47±2.7 weeks. The mean age among group 1 patients was 25.6±4.3 years and among group 2 was 24.9±3.81 years. majority of the group 1 were primigravidae (91%) and majority of group 2 participants were multigravidae (49%). 73% of the group 1 and 55% of group 2 participants underwent cesarean section. 18% of the group 1 and 22.7% of group 2 participants had eclampsia. 19% of the group 1 and 25.3% of group 2 participants had Abruptio placenta. 24% of the group 1 and 23% of group 2 participants had postpartum complications. The most common postpartum complications among group 1 patients was HELLP syndrome (10%) followed by Eclampsia (6%) and among group 2 patients was PPH (16.3%)

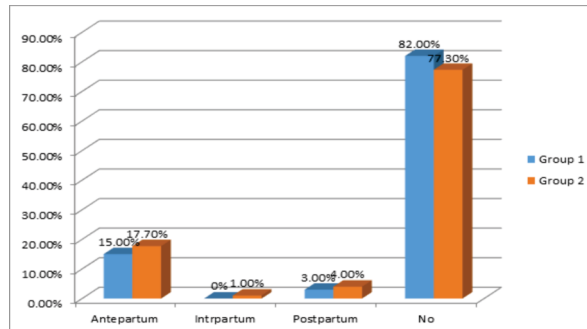


Figure no 1

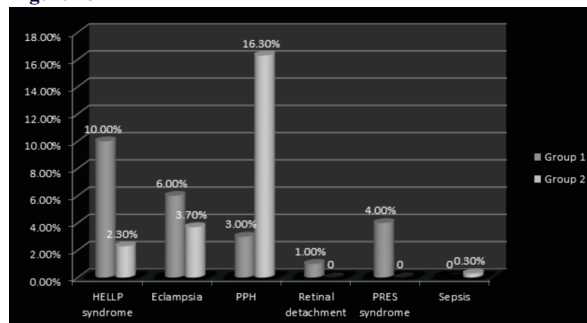


Figure no 2

DISCUSSION

Preeclampsia is one of the leading cause of maternal mortality and morbidity. It is common in first pregnancy. Brown et al.⁵ said preeclampsia is predominant in nulliparous. We found that 73% of the group 1 and 55% of group 2 participants underwent cesarean section. This rate is similar to those reported by Mashiloane et al.⁶ but higher to that of Hall et al where 81.5% delivered by means of cesarean section.⁷ Our study correlates with that of Railton less than that of Hall

and Murphy and higher than Nassar. We found that 18% of the group 1 and 22.7% of group 2 participants had eclampsia and 19% of the group 1 and 25.3% of group 2 participants had Abruptio placenta. The most common postpartum complications among group 1 patients were HELLP syndrome (10%) followed by Eclampsia (6%) and among group 2 patients was PPH (16.3%)

CONCLUSION

In conclusion, more women with early onset PE than late onset PE had severe complications throughout the course of their illness. Early onset PE was more common among primigravid patients. According to our research, women with early onset PE experienced greater morbidity than women with late onset PE.

Conflicts Of Interest

There are no conflicts of interest.

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