



## ORIGINAL RESEARCH PAPER

## Gynaecology

### OBSTETRIC OUTCOME OF PIH CASES ATTENDING DELIVERY WARD: A STUDY REPORT FROM A TERTIARY HEALTH CARE CENTRE : ODISHA

**KEY WORDS:** PIH, Pre-eclampsia, Eclampsia, LBW, IUGR

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#### ABSTRACT

**INTRODUCTION** Hypertension is one of the problems associated with pregnancy that may be followed by eclampsia, ARF, maternal death, premature delivery, IUGR and others. This study was conducted to determine the results of pregnancies associated with hypertension in patients attending Labour room of KIMS Hospital. A tertiary referral centre of Eastern India.

**METHODS** A detail study was conducted on all patients admitted to the delivery ward and who possessed the inclusion criteria for hypertensive pregnancy.

**RESULTS** Among 1500 number of delivery cases examined, 99 (6.6%) cases had hypertension. About 27 had preeclampsia-eclampsia, 16 had a systolic BP of 140-170 mmHg and 11 number of cases had > 190 mmHg. Where as 16 cases had diastole BP 90-110 mmHg and 11 mothers had diastolic > 110mmHg. The HELLP syndrome was evident in 2 cases. 26 mothers delivered prematurely and 2 had IUFD. Among all new born babies 40 were IUGR followed by 36 were low birth weight babies.

**CONCLUSION.** Based on our results hypertensive mothers who are young and have LBW babies experienced more perinatal complication. These untowards result of hypertension in pregnancy warrant the need for routine ANC, early detection and treatment of hypertension as early as possible and follow up after delivery.

#### BACKGROUND

A cross sectional descriptive study was conducted in KIMS AND PBMH affiliated to KIIT UNIVERSITY. This hospital is also a tertiary care centre. All hypertensive pregnant mothers (with a BP of 140/90 mmHg or more) who had visited the hospital for delivery during the time period 1 ST JANUARY 2017 to 31 st DECEMBER 2017 went under study regardless of when their BP had risen. Among 1500 number of cases of delivery 99 had hypertensive disorders. Maternal variables studied were ages, gestational periods, parity, status of BP, mode of delivery and post partum complications. Neonatal variables included weight at birth, APGAR, IUGR, IUD.

Reason for choosing KIMS was its NICU and excellent obstetric emergency care service available.

In our study hypertension was considered as a systolic BP of 140 mmHg and higher. A diastolic BP of 90 mmHg and higher. Based on sign and symptoms of the disease and hypertension before pregnancy patients classified as gestational hypertension, chronic hypertension, severe pre Eclampsia and eclampsia.

This study was conducted to establish fetal and maternal outcomes.

#### INTRODUCTION

PIH is an important cause of maternal and perinatal mortality and morbidity in developing country like ours. PIH is defined as BP > 140/90mmHg, taken after a period of rest on two occasions or > 160/110 mmHg on one occasion in a previously normotensive women. Pre-eclampsia is a multisystem disorder of mother that affects the fetus because of utero-placental insufficiency. In order to classify the hypertensive conditions of pregnancy the women who is found to be hypertensive prior to 20 th week is said to be having chronic or pre-existing hypertension in absence of other pathology unrelated to pregnancy. PIH is more commonly found in primi and there is a recurrence rate of 7%. PIH seen more in teenage and elderly gravida cases. Mostly PIH develops after 20 th weeks of gestation but it can also develop at anytime of delivery or night after delivery. The incidence of PIH is about 15% in our state. Fetal complications of pre-eclampsia and eclampsia include preterm delivery, oligohydramnios and sub optimal fetal growth. Maternal complications include bleeding and clotting disorders and HELLP syndrome. The cause of PIH, pre-eclampsia and eclampsia is poorly understood but it is believed to be an endothelial disorder. Placental abnormalities are found. Termination of pregnancy is the ultimate treatment for this disease. Decision for trial of labour or caesarean sections depends upon the severity of the condition, gestational age as well as fetal health. Though mild PIH cases can be managed at home but moderate to severe cases

are mostly hospitalised and under close monitoring. The risk to the mother and baby from the disease must be balanced against the risk of the prematurity in this case. Magsulph regime is given to the severe pre-eclampsia and eclampsia cases. This medication is safe for the baby. Eclampsia is a medical emergency. It is treated with mostly Magsulph. Magsulph prevent convulsion, maintain stable blood pressure with the goal of minimizing complications for both mother and baby. Beside Magsulph Lorazepam and phenytoin can be administered. There is no way known to prevent pre-eclampsia and eclampsia. However outcome can be improved with prompt recognition and management. Routine ANC is important for all pregnant ladies and also high risk screening. Most women with mild PIH have good pregnancy outcomes. Mortality rate due to eclampsia is about 2%. Studies show that recurrence rate is about 25% in subsequent pregnancy.

#### RESULTS

Among those who delivered most of them fell in 20 to 29 range of age group. 1% were ages less than 20 and 30% were above 30. Out of 99 cases 70 were primi cases, 20 cases were gravid two rest 9 cases were grandmulti.

#### DEMOGRAPHIC CHARACTERISTIC FEATURES.

##### AGE

< 20	1
20 - 25	15
26 --30	41
>30 32	

##### PARITY

Primi	70
Gravidatwo	20
More than three	9

##### GESTATIONAL AGE

20 TO 29	68%
30 TO 34	17%
34 TO 36	5%
>36	6%

##### MODE OF DELIVERY

NVD	23
L.S.C.S.	76

##### BIRTH WEIGHT

700 --1400 gm	14
1400 --2000gm	17

2000--2400gm	17
2400--2600gm	13
2600---3000gm	15
>3000	16

#### APGAR SCORE

<7	23
>7	72

#### DISCUSSION

Over the study of one year from January 2017 to December 2017 1500 number of cases were registered who attended delivery ward.they screened for hypertension.The prevalence was found to be 6.6 % in this study.The percentage is high because the fact that it was a referral hospital based study and mostly complicated cases are referred here.In our study prevalence of age group were found to be about 25 years. There is a significant association between lower socio-economic status and hypertension in pregnancy.Most of the patients were admitted through emergency as compared to OPD admission. 56 % fell in age group 21 to 30 years. 67 Cases were booked and 32 cases were unbooked. 70 Number of pregnant ladies were primigravidae out of which 68 % had mild PIH, 27 % had severe PIH and 7 number of cases presented with eclampsia.PIH was found more prevalent in primi.97% of women with mild PIH had gestational time 34 to 38 weeks and with severe PIH had gestational time 30 to 34 weeks. Cases with mild PIH delivered vaginally. 75 Cases underwent caesarean section.Major indications for caesarean section are eclamsia,fetal distress. Two cases presented with IUD.There was no maternal death.

#### CONCLUSION

It is evident that PIH has significant impact on maternal and fetal outcome.Timely referral to higher centre are very important.Most patient with mild PIH have good obstetric outcome.Eclampsia is a serious condition with about 2% mortality rate.The knowledge of risk factors for hypertensive disorders in pregnancy may give tracts for prevention of this disease.Early diagnosis , treatment through regular ANC are no doubt key factors to prevent this condition and its complecations.Therefore it is important to follow a sound strategy for management of PIH and as well as management of maternal and child complecations.

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