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Maternal and Foetal Outcome in Eclampsia Retrospective Study

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Introduction- Though by the end of 20th century, eclampsia has become almost unknown to obstetrician in the developed countries. It still remains an important factor of maternal and perinatal morbidity and mortality in the developing countries like India.

Eclampsia is the onset of seizures (convulsions) in a woman with pre-eclampsia.

Pre-eclampsia is a disorder of pregnancy in which there is high blood pressure and either large amounts of protein in the urine or other organ dysfunction, Onset may be before, during, or after delivery.

Most often it is during the second half of pregnancy. The seizures are of the tonic-clonic type and typically last about a minute. Following the seizure there is typically either a period of confusion or coma.

Pre-eclampsia is estimated to affect about 5% of deliveries while eclampsia affects about 1.4% of deliveries. In the developed world rates are about 1 in 2,000 deliveries due to improved medical care. Hypertensive disorders of pregnancy are one of the most common causes of death in pregnancy.

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Dr. M. Bansal ^α & P. Borkar ^σ

I. INTRODUCTION

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Pre-eclampsia is estimated to affect about 5% of deliveries while eclampsia affects about 1.4% of deliveries. In the developed world rates are about 1 in 2,000 deliveries due to improved medical care. Hypertensive disorders of pregnancy are one of the most common causes of death in pregnancy.

They resulted in 29,000 deaths in 2013 – down from 37,000 deaths in 1990. Around one percent of women with eclampsia die.

The word eclampsia is from the Greek term for lightning. The first known description of the condition was by Hippocrates in the 5th century BCE.

Typically the pregnant woman develops hypertension and proteinuria before the onset of a convulsion, the hallmark of eclampsia. Other cerebral signs may immediately precede the convulsion, such as nausea, vomiting, headaches, and cortical blindness.

If the complication of multi-organ failure ensues, signs and symptoms of those failing organs will appear, such as abdominal pain, jaundice, shortness of breath, and diminished urine output.

The fetus may develop intrauterine growth retardation, and with maternal convulsions, bradycardia, and fetal distress. Placental bleeding, and placental abruption may also occur.

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Sometimes the pregnant woman becomes comatose without preceding convulsions. Upon awakening from the coma, some experience amaurosis fugax: a "dark" and "fleeting" unilateral temporary blindness.

II. MATERIAL AND METHODS

This study was carried out in the department of Obs and Gyn, GMC Jagdalpur, Chattisgarh.

Study design: Retrospective study.

Duration of study: This study was carried over period of one year i.e. Dec. 2013 to Dec. 2014.

Sample size: It is a retrospective study of 66 patients Of eclampsia with total 2856 deliveries in one year 2013-14 in GMC Jagdalpur.

III. OBSERVATION

The patients were analysed with respect to age, parity, booked/unbooked status, gestational age, type of eclampsia, mode of delivery and outcome of mother and fetus

All patients with eclampsia has received standard Pritchard regimen with MgSo4.

Out of 2856 deliveries in year 2013-14, 66 patients were admitted with eclampsia, so overall incidence of eclampsia is 2.31%.

This hospital is located in most remote area of chhattisgarh and most of the patients are coming from rural area.

Area wise distribution of eclampsia, from rural area, 56 cases (84.84%) and urban area 10 cases (15.15%) were recorded.

Age

Age of patients	Number of cases
18-20 yrs	25
20-25 yrs	28
25-30 yrs	10
30-35 yrs	03

Most of the eclampsia patients were reported with age between 20-25 yrs and 18-20 yrs i.e. 28, 25 respectively

	Cases	Percentage
Primigravida	46	69.7
Multigravida	20	30.3

46(69.7%) patients were primigravida and 20(30.3%) case were multigravida, including 6 cases

were gravida two and 14 cases were more than three gravida.

55 (83.33%) cases of antenatal eclampsia and 11(17.66%) cases of postnatal eclampsia were reported to the hospital.

Out of antenatal eclampsia, 34 (61.8%) cases were full term (37 weeks completed) and 21 (38.18%) were preterm.

IV. DISCUSSION

All cases including antenatal and postnatal eclampsia were received standard Pritchard regimen with MgSo₄. (loading 4 gm iv followed by 5 gm im on each alternate buttock).

Induction of labour was done in all antenatal eclampsia irrespective of gestation age.

Monitoring of labour was carefully done, simultaneously investigation was sent and complication of eclampsia also noted which leads to maternal morbidity and mortality.

All patients were delivered within 24 hours of induction of labour.

Normal vaginal delivery occurs in 48(87.27%) cases and LSCS was performed in 3 (5.45%) cases in view of foetal distress.

Out of Total Deliveries, 24 babies was live birth and 27 babies was IUD and perinatal mortality is around 53%.

Out of 66 cases of eclampsia, 59 patients were discharge after 1 week without any complication, one patient was absconded after two days of delivery and 6 cases had mortality.

Out of 6 cases 2 patient were expired due to massive PPH, 2 due to ARF, one due to CVA and one due to DIC.

V. CONCLUSION

In developed countries, incidence of eclampsia is markedly reduced over last 50 years. But in developing countries like ours- incidence is very high ranging from 0.5 to 1.8%. In remote places, however incidence is > 4%.

In our study incidence is 2.31%. This is mainly due to lack of awareness about disease, women illiteracy, poor transport facilities and delayed referral.

Maternal mortality in the present study is 9%.

Most of the Indian reports, Maternal mortality is between 8-14%.

The three delays framework commonly used to understand contribution to maternal death are

- Phase I delay- Delay in deciding to seek care on part of patient and family.
- Phase II delay- Delay in reaching an adequate health care facility.
- Phase III delay- Delay in receiving adequate care at the facility.

Our goal is to reduce the incidence and so the maternal mortality

But how.....?

- Early detection of PIH and continuous followup.
- Creating awareness among family members and patients for the disease and its deadly outcome.
- Creating awareness among health personals including mitanins and dais.(ASHA workers)
- Access to transport facility
- Timely referral is very important.
- Basic t/t at primary level specially at PHC & CHC level.

How to prevent.....?

Eclampsia is mostly preceded by severe preeclampsia.

Thus prevention of Eclampsia rest on... Early detection & effective management of PIH with judicious termination of pregnancy wherever needed. However, Eclampsia can occur bypassing the Preeclampsia state and as such is not always a preventable condition.

Incidence of eclampsia should be reduced so as to reduce the maternal mortality and improve fetal outcome. Despite the focus on maternal health over last 50 years antenatal care is very low. It is necessary to create awareness among society and to bring quality care in reach of those who need it.

In 21st century we really don't want any single mother to die of eclampsia.

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