Original Research Paper

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STUDY OF DIFFERENT OUTCOME IN ANTEPARTUM ECLAMPSIA IN TERTIARY CARE HOSPITAL

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ABSTRACT **Background-:** In today, s era, the prevalence of Eclampsia and its complications are high, so we decided to study pregnancy outcome in all Antepartum Eclampsia patients. The objective of this study was to determine the presentation, risk factors, management, maternal and perinatal mortality and morbidity, in women presenting with eclampsia. Though the incidence in developed nations has drastically reduced, it has remained the same over years in India, mainly due to poor socio-economic status and inadequate ante natal check-ups. **Methods: -** This study was conducted in RNT medical college obstetric and gynaecology department from a month of June 2022 to July 2022 in a prospective way. A total of 25 cases were taken and evaluated in respect to their age, parity, gestational age, details of previous antenatal check-ups, clinical features at presentation, nature and number of, management in the institution and mode of delivery, fetal outcome maternal and morbidity and mortality. **Results: -** present study shows that most of the patient were primigravida ,20-25 year of age group in a gestational age 31-36 week without a known case of PIH. In view of fetal outcome most patient had cesarean section, 85% newborn were live birth with 77.7% low APGAR and 81.4% had low birth weight. In view of maternal outcome 36% patient had poor outcome while 645 had good outcome. **Conclusion: -** As eclampsia is a preventable disease, early identification and early referral might reduce feto-maternal morbidity and mortality. Outcome of eclampsia is also satisfactory if immediate treatment is started.

INTRODUCTION

Eclampsia is defined as the development of seizures that cannot be attributed to other causes and or unexplained coma during pregnancy or puerperium in a women with pre-eclampsia [1].

Eclampsia is the third commonest cause of maternal mortality after haemorrhage and infection in the developing countries [2].

Eclampsia may be antepartum, intrapartum and postpartum. Antepartum eclampsia is more dangerous than postpartum eclampsia [3].

Primigravida are at higher risk of developing eclampsia [4]. Eclampsia is most common in the last trimester of pregnancy and becomes increasingly more frequent as term approaches [5]

Major complications include placental abruption, neurological deficits, aspiration pneumonia, pulmonary edema, acute renal failure, HELLP syndrome, DIC, cardiopulmonary arrest and maternal death [6]

Poor fetal outcome is mostly attributed by iatrogenic prematurity, respiratory distress syndrome (RDS), intrauterine asphyxia, intrauterine growth restriction (IUGR) and intrauterine death (IUD).

MATERIAL AND METHOD

This prospective study was conducted over a period of 2 month in Obstetrics and Gynaecology department of Ravindranath tagore Medical College Hospital, Udaipur.

All Antepartum eclampsia patients who were admitted in causality from June 2022 to July 2022 were included in this study.

Pregnancy was terminated in all patients irrespective of gestational age. All cases were treated with Magnesium sulphate (Pritchad regimen). Hypertension was controlled with intravenous /oral labetalol and nifedipine if necessary.

In our study total cases were 25.

The variables analysed were age, parity, booking status, gestational age, and mode of delivery, feto-maternal outcome.

Inclusion criteria
- Patients with antepartum eclampsia

Exclusion criteria
- Patient with convulsion due to causes other than eclampsia
- Intrapartum and postpartum eclampsia.

RESULT

Out of 2480 Patients there were 25 cases were antepartum eclampsia, so the frequency is 1.006 %.

Patient profile

Table 1 shows that maximum number of cases 48% were in 20-25 year of age group ,24% cases were in 26-30 years,16% in <20 year, and 12% were in 31-40 year of age group.

Most of the patient were primigravida 60%, and 40% were multigravida including previous normal and Cesarean section.

This study shows that most of the patient with antepartum eclampsia 48% were in gestational age 31–36 week ,32% were in 37-40 week and 20% were in 24-30 week gestational age.

There were 72% p20-atient who were not a known case of pregnancy induced hypertension (PIH), and 28% were known case of PIH.

Table no:-1 patient profile

Age (yr)	No. of patients	%
<20	4	16
20-25	12	48
26-30	6	24
31-40	3	12
Parity		
Primi	15	60
Multi	10	40
Gestational age(wk)		
24-30	5	20
31-36	12	48
37-40	8	32
PIH		
Known case	7	28
Not a known case	18	72

Fetal outcome :-

This study shows that out of total 25 patient 44 % patient deliver vaginally, while 56% patient had cesarean section.

In study we conclude that live born newborn were 85% (23 out of 27), while 15% were stillbirth (5 out of 27) .in our study 2 patient had twin pregnancy.

By this study we find that 81.4% newborn had <2.5 kg while 18.6%

newborn had birth weight >2.5 kg.

This shows that only 22.3 % newborn had APGAR >7, while 77.7% newborn had <7 score.

Table 2:- fetal outcome

Mode of delivery	No. of patient	%
NVD	11	44
LSCS	14	56
Fetal outcome		
Live birth	23	85
Still birth	4	15
Birth weight (kg)		
<2.5	22	81.4
>2.5	5	18.6
APGAR score		
<7	21	77.7
>7	6	22.3

Maternal complication:
In this study we find out 64% patients had good maternal outcome, while 36% patients had poor maternal outcome. Out of maternal complications 2 patients had pulmonary edema,1 patient had cerebrovascular attack (CVA), 1 patient had HELLP (haemolysis elevated liver enzyme low platelet),2 patients had renal impairment, while 3 patients had other complication (postpartum haemorrhage Sepsis, abruption). No patient had ARDS (acute respiratory distress syndrome) and DIC (disseminated intravascular coagulopathy). 2 patients died due to complications.

Table no 3 :-maternal complication

Maternal outcome	NO. ot patients	%
1.Good	16	64
2.Poor	9	36
a.Pulmonary edema	**2**	
b. CVA	1	4
c.HELLP	1	4
d.renal impairment	2	8
e.ARDS	0	0
f.DIC	0	0
g. others	3	12

DISCUSSION :
In our study most of the patients were in age group 20-25 year of age group Parmeet Kaurin [8] her study observed maximum number of patients within this group. it is found that eclampsia is prevalent below the age of 25 yrs. Rowshan et al assessed 416 patients of eclampsia and 77 percent were found between 20 – 25 yrs [7]

We found that Gravidity also influences in occurrence of eclampsia. Primigravida are more prone to develop eclampsia than multigravida. In this study, it was found that most of the eclamptic patients were primigravida (60%). This result is comparable to other study like Shiraz's et al, Dutta et al and Shaheen B et al [9].

In our study shows that most of the patients ere in gestational age of 31-36 week of gestation this is supported by other study like Bhanu B. et al [10].

Thus, primigravida age of 20-25 in gestational age 31-36 week of gestational age are in risk factor for developing antepartum eclampsia.

The definitive treatment of eclampsia is delivery, irrespective of gestational age. In our study 56% patient had LSCS (lower segment c section) Similar observation was found in the study by Choudhary and Manjusha et al.[11]

the percentage of live birth and still birth in our study was 85% and 15% respectively. Significant association has been noted between eclampsia and perinatal mortality and morbidity. Prematurity with septicaemia and respiratory distress syndrome was the major cause of neonatal death. Similar study showed by Rani AR et al. [12]

In our study most of the neonate were low birth weight 81.4% due to premature intrauterine growth retardation and premature induction. 77% newborn had low APGAR Pre-eclampsia is the leading cause of premature termination of pregnancy, and so as intrauterine growth retardation, perinatal mortality and morbidity. Eclampsia is a preventable disease if pre-eclampsia is detected and treated at an early stage.[13]

The pathophysiology is thought to be cerebral vasospasm leading to ischaemia and cerebral oedema. Worldwide cerebral haemorrhage is the principal cause of death, although pulmonary complications have now superseded cerebral cause. Lack of antenatal care or substandard care is related to death in hypertensive diseases.[14]

Ante partum eclampsia is one of the leading cause of maternal mortality worldwide. In present study, out of 2 maternal deaths 1 patients died of pulmonary oedema and one patient died of CVA. . Almost one third of patient suffer from complications.[15]

Maternal morbidity and mortality were reduced because of early intervention whereas babies were exposed to the risk of prematurity.

CONCLUSION
This study shows that eclampsia is still an important obstetric emergency. Good antenatal care, early identification of pre-eclampsia and its complications, timely intervention can reduce the high incidence of eclampsia.

As eclampsia is a preventable disease, early identification and early referral might reduce feto maternal morbidity and mortality.

Significant efforts are required towards female education, women empowerment and provision of social amenities in rural area.

Outcome of eclampsia is also satisfactory if immediate treatment is started. So, every patient should be admitted in hospital as soon as possible and receive anticonvulsant therapy immediately, even before admission in hospital.

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