

Maternal Outcome Associated With Eclampsia In Patients Presenting To SGRH

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ABSTRACT

OBJECTIVE: To assess maternal outcome in patients with eclampsia in SGRH.

MATERIAL AND METHOD: Descriptive study which was carried out in SGRH from January 2009 to December 2009. maternal outcome was measured in parameters of pulmonary oedema, renal failure, HELLP syndrome, cerebral haemorrhage and death.

INTRODUCTION

Eclampsia is defined as occurrence of convulsions during pregnancy or within ten days postpartum, not caused by co-incidental neurological disease (e.g. Epilepsy) in a woman who meets the criteria for pre-eclampsia ⁽¹⁾.

Each year approximately 63000 women worldwide die of eclampsia and pre-eclampsia and 99% of these deaths occur in low income countries ⁽²⁾.

Incidence of eclampsia in developed countries is 1 in 2000 to 5/ 1000 ⁽³⁾ deliveries while in Pakistan it ranges from 0.31% to 4% ⁽⁴⁾. HELLP syndrome represents a severe form of pre-eclampsia/ eclampsia characterized by haemolysis, elevated liver enzymes and low platelets ⁽⁵⁾. Endothelial dysfunction is associated with multiple organ failure in patient with pre-eclampsia or eclampsia. Mostly maternal deaths are due to HELLP syndrome associated with eclampsia and multi organ failure.

Present study was carried out to investigate the major maternal morbidity or mortality associated with eclampsia in order to change the trend in management to prevent further complications.

MATERNAL AND METHODS

Study design:

Descriptive study carried out from 1st January 2009 to 31st December 2009.

Setting:

Obstetrics and Gynaecology Wards Unit I in SGRH.

Including Criteria:

All those patients who presented with fits after 20 weeks of gestation or within 48 hours postpartum

were included in study. Informed written consent taken from the patient for the use of personal information as study purpose. Patient age, parity and gestational age calculated. Presenting symptoms and past symptoms like headache, blurring of vision and epigastric pain also noted.

Patient were divided into 3 groups:

1. Intrapartum eclapsia (during delivery)
2. Antenatal eclampsia (antenatal)
3. Postnatal eclampsia (postnatal)

Thorough examination regarding blood pressure, reflexes, pulmonary oedema, and pedal oedema was also checked.

Analysis:

Data collected and entered into SPSS 16 version a computer based statistical program for statistical analysis of study.

RESULTS

- 23100 deliveries in one year (2009).
- 62 patients were diagnosed as eclampsia (0.3%).

Antepartum eclampsia → 30 (48%)

Postpartum eclampsia → 21 (34%)

Intrapartum eclampsia → 11 (18%)

Primigravida patients were seen to be the high risk patients 63% Emergency caesarean section was done in 66% (41%) of patients while 33% of patients (21) delivered vaginally. Out of all the eclamptic patients 62, 6 (9.6%) patients had CVA. 8 (12.9%) had cardiopulmonary complications. Haematological, acute renal failure and visual disturbances occur in 6.4%, 6.4 and 4% of the patients respectively.

Maternal Complications Associated with Eclampsia:

Complications	Number	Fetal outcome
Cerebro vascular accident	6 (9.67%)	5 died and 1 recovered
Cardio pulmonary complication	8 (12.9%)	4 died and 4 recovered
Haematological	4 (6.4%)	Recovered
Acute renal failure	4 (6.45%)	Recovered
Visual disturbance	3 (4.83%)	Recovered

Demographic Information:

Age	Eclampsia (Number)
21-25 years	39 (62%)
26-30 years	20 (32%)
31-35 years	3 (4.83%)

DISCUSSION

In developing countries incidence of eclampsia is higher (0.7% in India and 9% in Bangladesh) than in developed countries 0.4 to 0.5/1000 deliveries (6).

In our study antepartum eclampsia seen in 48% of cases and postpartum and intrapartum eclampsia in 34% and 18% of cases. This was quite different from Harare Maternity Hospital 62% antenatal eclampsia (7).

Most of the patients in our study belong to the age group 20 to 25 years 62% and this is similar to many studies.

In our study 66% delivered by emergency caesarean section while rest delivered vaginally. This is contrary to the study of Alinzi et-al which showed C section to be the mode in 54% of the cases (8).

In our study 9 (14%) patients died of serious cerebrovascular and cardiopulmonary complications. This high fatality rate is due to mostly patients are unbooked and belong to poor

socioeconomic status and had no access to medical and health care facility. Cerebral haemorrhage and cerebrovascular accident is the leading cause of death in our study (9%). Majority of the mothers died are less than 27 years of age (78%).

CONCLUSION

Eclampsia is still the major threat to the pregnant population. Improvement in health care facility and awareness may improve perinatal and maternal outcome.

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