

INCIDENCE OF ECLAMPSIA AND CLINICAL PROFILE: A PROSPECTIVE STUDY**G.VINAYA^a, S. RIYAZ AHAMED^{1b} AND N. G. GURURAJ^c**^{abc}Department of Obstetrics and Gynecologys, Community Medicine, Orthopedics, Koppal Institute of Medical Sciences, Koppal, Karnataka, India**ABSTRACT**

The present study was carried with objective of measuring incidence of eclampsia and to study the profile of patients attending tertiary care centre. Incidence of eclampsia was noted to be 2.12%. Majority of the patients were unbooked,(80%) and from age group of 20-25 yrs . 75 % of patients were primigravidas. Antepartum eclampsia was seen in 61%, intrapartum eclampsia in 28% and postpartum eclampsia in 11%. Maternal mortality was 1%.

KEYWORDS : Eclampsia, Incidence, Maternal mortality

Eclampsia is an acute and life threatening complication of pregnancy is characterized by the appearance of tonic clonic seizures, in a patient with pre-eclampsia (Sibai, 2005). It is estimated to complicate 1 in 2000 deliveries in developed countries and from 1 in 100 to 1 in 1,700 deliveries in developing countries (Duley, 2003). Eclampsia accounts for 50,000 maternal deaths a year worldwide. The maternal case fatality rate is 1.8% and 35% of eclamptics will have one major complication (Sibai, 1985). The perinatal mortality rate in developing countries is as high as 80 (or) more per 1000 births. Majority of cases of eclampsia are young primigravidas and those with no prior antenatal care . Though not all cases of eclampsia can be prevented , majority of cases can be prevented by early detection and effective treatment of preeclampsia, for which good ANC services are needed (Knight, 2007). The incidence of eclampsia varies from country to country and from zone to zone in the same country, poor antenatal care, low socio economic status and illiteracy are responsible for higher incidence of eclampsia. This study was undertaken with objective of finding out incidence of eclampsia and profile in the local population.

MATERIALS AND METHODS

This prospective study was carried out (during the period of December-2009 to November-2010) in tertiary care hospital, Karnataka Institute of Medical sciences. About 100 cases of Eclampsia were included in the study. Known epileptics, patients who are put on other regimes and Eclamptic patients below 20 weeks and above 42 weeks were excluded. A detailed history regarding age, parity,

gestational age, number of convulsions, duration of symptoms of pregnancy induced Hypertension, history of imminent symptoms were taken from close relatives and also from the patient if she is conscious (or) taken retrospectively from her. Any past history of hypertension (or) renal disease (or) eclampsia in previous pregnancy was elicited.

A thorough general examination and obstetric examination were made. On general examination, conscious level, degree of edema, anaemia, pulse rate, temperature, respiratory rate, blood pressure, cardiovascular system, respiratory system, fundus examination were done. Blood and urine were sent for all investigations related to eclampsia like renal function tests, liver function tests, haematological tests and coagulation screening tests were carried out in all patients. A life line was established and the Regimen was started. Pulse, Blood pressure, Respiratory rate, Oxygen saturation monitored for every 30 minutes, Knee jerk and urine output every half hourly.

Women admitted to eclampsia labour room is given loading dose of 4gm of 50% I.V. magnesium sulphate diluted in 20cc of 5% of dextrose over 10-15 minutes, simultaneously 4gm of magnesium sulphate Intramuscularly, 2gm on each buttock was administered . The patient is monitored with adequate anti hypertensives, hydration and immediate termination of Pregnancy. If the convulsions are not controlled even after 30 minutes of giving single dose magnesium sulphate, then it is switched over to other regimes like low dose magnesium sulphate and Phenytoin Regime. Control of hypertension is achieved

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by Tab. Nifibipine 10mg Thrice day maximum of 120mg in conscious patients and injection lebetalol 20mg IV maximum of 300mg in unconscious patients.

Obstetric Management

After stabilizing the patient, a detailed obstetric examination was done. Mode of termination was planned according to the gestational age, viability of the fetus, and the cervical scoring. Patients were induced with prostaglandin E1 and accelerated with oxytocin infusion. Cesarean section was done for obstetric indications (or) for failed induction. After delivery the patient was observed

carefully for 48 – 72 hours in the labour ward and post operative ward and followed up until the discharge of the patient. Neonatal outcome was recorded in terms of maturity, type of birth and birth weight. Neonates were also followed up until the discharge of the mother.

RESULTS

Out of 8100 deliveries during the study period in the hospital 172 cases of eclampsia were identified with the incidence of 2.12%. 100 cases of eclampsia in accordance with inclusion criteria were included in the study. The study

Table 1: Demographic and Clinical Profile of Eclampsia Cases

Agewise Disrtibution		
Age	No of cases	Percentage
<19	16	16
20-25	74	74
26-30	9	9
31-35	1	1
Type Of Eclampsia		
Antepartum	61	61
Intrapartum	28	28
Postpartum	11	11
Gestational Age		
<28 weeks	19	19
28-34 weeks	36	36
>34 weeks	45	45
Incidence In Relation To Level of Consciousness		
Conscious	45	45
Irritable	40	40
Semi conscious	9	9
unconscious	6	6
Convulsions To Treatment Interval		
0-6 hrs	74	74
>6 hrs	26	26
Controlled / Uncontrolled		
Controlled	75	75
Uncontrolled	25	25
Systolic Arterial Pressure		
<140	5	5
140-160	42	42
>160	52	52
Diastolic arterial pressure		
<110	27	27
110-120	54	54
>120	27	27
RFT/LFT		
Normal	81	81
Abnormal	19	19

Table 2 : Mode of Delivery

MODE OF DELIVERY	No of cases	Percentage
Vaginal	82	82
Vaginal instrumentation	3	3
Operative	15	15
ANTEPARTUM ECLAMPSIA - 61 CASES		
Vaginal	47	82
Vaginal instrumentation	2	3
Operative	12	15
INTRAPARTUM ECLAMPSIA -28 cases		
Spontaneous	15	53.57
Augmentation	13	46.42
LSCS	0	0

group comprised of 80% unbooked cases and majority of them illiterate (72%) and from rural areas (89%). Out of 100 cases 75 % were primigravida.

Out of 100 cases of eclampsia 82% cases has gone for normal vaginal delivery and remaining 15% and 3% by vaginal instrumentation and Operative respectively. Among antepartum eclampsia patients 82% cases delivered through induction and 18% spontaneously (Table 1 & 2).

DISCUSSION

Incidence of eclampsia in our study was 2.12% which is in corroboration with studies carried out by Sonyal et al., (1987) and Swain et al., (1993). However the incidence of eclampsia reported by Goswami et al., (1983), Sonyal et al., (1987) and Swain et al., (1993) ranges from 0.7% to 4% in India. In our study the incidence of eclampsia is highest in the younger age group which is comparable to incidence quoted by Kameshwari et al., (1976), and Goswami et al., (1983). Majority of patients in our study were primigravidas. They constituted 75% of patients. Incidence of eclampsia in primigravida in studies by Goswami et al., (1983), The Eclampsia Trial Collaborative Group., (1995) and Mudaliar et al., (1990) was found to be 67.57% , 85.18%, 64% and 75% respectively

About 61% of patients had antepartum eclampsia. 28% of patients had intrapartum eclampsia. 61% + 28% of patients had antepartum and intrapartum eclampsia as the precise diagnosis of the onset of labour is not easily ascertainable and eclampsia per se increases uterine contractility and leads to premature labour, a discrete

overlap how antepartum and intrapartum may exist. Incidence of postpartum eclampsia is very low in our study about 11% comparable study conducted by (Nawani et al., 1996).

In our study 61 cases (61%) had antepartum eclampsia after the patient was settled PV examination was done to note the state of cervix in patients with unfavourable cervix induction of labour was done with Misoprostol 25 microg to 200 microg per vaginally. In patients with favourable cervix augmentation of labour was done with oxytocin drip and amniotomy. 11 patients had gone into spontaneous labour at the time of PV examination. Induction of labour was done in 52 cases, all were instilled with Misoprostol vaginally. 9 patients in spontaneous group delivered vaginally and LSCS was done in one patient and one more patient delivered vaginally by forceps. Incidence of LSCS in our series was 14%. Renal failure was the commonest complication noted in our series. The results pertaining to maternal mortality of about 1% reflect findings from other studies reporting the maternal mortality (Pritchard et al., 1984).

CONCLUSION

Eclampsia is an important cause of maternal and perinatal morbidity and mortality. And this can be effectively controlled and treated with timely and good antenatal care, prompt admission of the cases with severe PIH, effective control of convulsions and termination of pregnancy as early as possible by reducing the 1st convulsion and delivery interval.

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