Fetal and Maternal out Come in Eclampsia

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Objective: To Study the fetal and maternal complication of patient developed eclampsia. **Design:** Prospective study. **Place and duration of study:** Department of Obs. & Gynae Lahore General Hospital Lahore. **Patient and methods:** This Study way conducted from Aug 04 to Aug 05. All the patients presenting with eclampsia to the labor ward were included in study. **Results**: A total of 3850admission were made in labour word. During Period and out of them 58 Cases were of eclampsia out of them 20 were Primigravida 22 multi gravida and 16 grand multi gravida. Out 58 patients 31 patient developed the complication of eclampsia, 15, IUGR., 6 abruptio Placenta, 4 PPH, 4 Pulmonary edema and 2 Cerebral in Farcts. Among the new born prematurity was found to be major cause of Perinatal mortality. Conclusion:- Eclampsia is a dreadful complication of Preeclampsia associated with high perinatal and maternal mortality. An improvement in pre-natal consultation should make it possible to reduce its incidence.
Key words: Eclampsia, PET, pregnancy

Eclampia is defined as the occurrence of convulsions associated with signs of pre-eclampia (hypertension and proteinuria) during pregnancy labor or with in 7-days of delivery and not caused by epilepsy or other convulsive disorders. Its incidence varies widely from 1 in 100 to 1 in 2000 pregnancies[1]. Eclampia occurs in 1-2% of women with pre-eclamps in developed countries[2]. Hypertensive disorders are a leading cause of maternal mortality. Eclampsia is a common cause of latrogenic prematurity in new born.

Convulsions may occur antepartum (38%) intrapartum (18%) or postpartum (44%)[3]. Primigravida are at higher risk of convulsions and that antepartum convulsions are more dangerous then those beginning after delivery.[3,4] Magnesium Sulphate is the first line anticonvulsive agent used in the treatment of eclampsia and has been found to be the most effective agent in relation to a number of measures of maternal and perinatal morbidity and in prevention of recurrent convulsion[5,7]. The other mainstay of management case of eclampsia is early delivery to improve the prognosis in terms of reducing maternal and perinatal morbidity and morality.

The Following are considered risk factors for the development of pre-eclampsia preceding eclampsia; extremes of maternal age, primigravida, multiple gestations, molar pregnancy, pre-existing hypertension, diabetes mellitus or renal disease, pre existing connective tissue or vascular disease, prior history of pre-eclampsia or eclampisa and family history of pre eclampsia or eclampsia.

The purpose of this study was to report the frequency of this lethal maternal Pregnancy associated disorder in terms of age, parity, associated maternal complications and fetal outcome. Also to highlight the lapses of our setup which can be overcome to improve the outcome and reduce its incidence.

Material and methods:
This Study was carried out in Department of Obs. & Gynae, Lahore General Hospital Lahore. During a period of one year from Aug 2004 to Aug 2005 All the Patients admitted with eclampsia were included in this study.

Inclusion criteria were patients more than twenty weeks gestation with history of pre-eclampsia headache, epigastric pain, nausea, vomiting, rapidly increasing generalized body swelling, hypertension, proteinuria, edema and superimposed convulsion. Exclusion criteria was gestational age less than 20 weeks.

Results:
During this period a total number of 3850 laboring Patient were admitted in labour ward out of them 58 Patient were of eclampsia. The frequency of eclampsia nearly came out to be 15 patient per 1000 deliveries (Table 1).

Table I, II, Shows that patient age range from 18-43 years average age is 30.5 year. Maximum cases seen from 20-30 of age and at extreme of parity primigravida and gravida multigravida.

Table I: The age distribution (n =58)

Age (Years)	Number	Percentage
18-20	20	34.4
20-30	22	37.93
30-43	16	27.58

Table II: Parity of patients (n=58)

Parity	Number	%age
Primigravida	20	34.4
G_2-G_5	22	37.93
G_5 or more	16	27.58

Table III shows the number of cases presenting at different period of gestation. Maximum Cases were seen at term. Another common feature in all these patients were that

they belonged to poor socio-economic class, living in far-flung area and never seeking proper antenatal advice even if living in the area near by.

Table III: Gestational age

Gestational age	No.	%age
37 + week	44	75.86
28-36 week	12	20.68
20-28 week	02	03.44

Eclampisa occurred ante-partum in 52 patients, 2 case of intrapartum and 4 patient of post-partum eclampsia were noted post-partum cases on an average occurred 12-36 hours after delivery.

Table IV Mode of delivery (n=58)

Mode of delivery	No. of Cases	(% age)
SVD	12	20.68
SVD with EPI	12	20.68
Vacuum delivery	4	6.89
Outlet forceps delivery	6	10.34
Caesarean Section	24	41.37

Complications were observed in 31 Patients, 15case of IUGR, 6 Cases of abruptio Placenta, 4 had PPH, 4 pulmonary edema, 2 cerebral infact.

Table V Maternal complication (n = 31)

Complication	No. of Case	%age
IUGR oliohydromnios	15	48.38
Abruptio Placenta	6	19.35
Atonia, PPH	4	12.90
Pulmonary edema	4	12.90
Cerebral Infact	2	06.45

Four patients died due to complications giving a death rate of 7%. The perinatal mortality rate was high and prematurity being the leading cause.

Discussion:

Eclampsia is the commonest cause of convulsion during Pregnancy next being epilepsy (0.5% of pregnancies) It is very common in developing countries like Pakistan, and Bangladesh as supported by a review carried out in 1996 in Bangladesh[8].

The major cause being major social deprivation and lack of access to trained birth attendants and the incidence of eclampsia in some area of Bangladesh came out to be 30/1000 which is very close to this study i.e., 15%. One reason for this high incidence of eclampsia is that most uncomplicated labor cases never come to hospital cither deliver at home or in Primary Health Care Center and only complicated cases reach a tertiary Care Hospital owing to the poor socioeconomic condition of general population and lack of educational resources.

Maximum number of Patients were in their twenties this is like the study of Douglom and Redman[5].

Multiparous patient presented in eclampsia had history of eclampsia or PIH in previous pregnancy. Commonest presentation was typical convulsion superimposed on hypertension and proteinuria.

Commonest associated maternal complication were oliog hydroamnios and IUGR. 15 Patient, abruptio Placenta in 6 patients, 4 patients developed Pulmonary edema and same number developed atonia leading to PPH and 2 patients cerebral infacts.

Mode of delivery was most frequently by vaginal route 26 Patient and 24 by abdominal of delivery, as in study of Ruqqia[9].

Four patients died due to complications giving a death rate of 62%. This all is due to late referral to tertiary hospital, delay in hospital management, lack of transport, unbooked status of patient, high parity, prolong stat of unconciousness and multiple seizeres prior to admission Perinatal mortality rate was high due to prematurity and presence of IUGR as in the Study of Shehla[10].

Conclusion:

Eclampsia is a very common Pregnancy associated disorder in this part of the country. It can be diagnosed easily in the basis of history and typical clinical features. Most important feature of management is its prevention by Proper antenatal check-ups, availability of health facilities and Prompt referral to tertiary care hospital, but once it occurs it carries a high maternal and perinatal morality.

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