

Original Research Article

To identify the risk factors and complications of pre-eclampsia and eclampsia

Dr. Raj K.Kanwal¹ (Asst. Professor), Dr. Hemant Kansal² (Asst. Professor),
Dr. Anshu Gupta Singh³ (Asst. Professor), Dr. Ritu Sharda⁴ (Asst. Professor) & Dr. Preeti
Jain⁵ (Professor)

Dept. of Obstetrics and Gynaecology, Amaltas Institute of Medical Sciences, Dewas,
M.P.^{1,2,4&5}

Dept. of Obstetrics and Gynaecology, Index Medical College Hospital & Research Centre,
Indore, M.P.³

Corresponding Author: Dr. Hemant Kansal

Abstract:

Background & Method: The aim of this study is to identify the risk factors and complications of pre-eclampsia and eclampsia. The patients were selected from patients who were admitted to as emergency cases in labour room patients were irrespective of age and parity. On a specially designed proforma for this study, the patient particulars like detailed obstetric history, examination and laboratory findings were recorded; were studied.

Result: In the current study incidence of preeclampsia and eclampsia was found to be 1.03% and 2.23% respectively. Our institute being a tertiary center resulting in higher referral rate would probably accounts for this high incidence of eclampsia.

Conclusion: Eclampsia is an ongoing challenge for the whole medical community, the root of which lies in the soil of illiteracy, poverty and poorly implemented health care system. Eclampsia is associated with significant maternal and perinatal morbidity and mortality. In majority of pre-eclampsia and eclampsia patients systolic blood pressure on admission was more than 150 mmHg and diastolic blood pressure was more than 110 mmHg. Serum Urea and creatinine was found to be within normal limit in majority of pre-eclampsia and eclampsia patients.

Keywords: risk, complications, pre-eclampsia & eclampsia.

Study Designed: Observational Study.

1. INTRODUCTION

A modest amount of all pregnancies are convoluted by hypertension. Eclampsia and toxemia represent about portion of these cases overall and have been perceived and portrayed for quite a long time notwithstanding the general absence of comprehension of the disease.[1] In the fifth hundred years, Hippocrates noticed that cerebral pains, seizures, and sluggishness were dismal

signs related with pregnancy. In 1619, Varandaeus begat the term eclampsia in a composition on gynecology.[1,2]

Eclampsia, which is viewed as a confusion of serious toxemia, is usually characterized as new beginning of great mal seizure action or potentially unexplained unconsciousness during pregnancy or post pregnancy in a lady with signs or side effects of preeclampsia.[3] It normally happens during or after the twentieth seven day stretch of development or in the post pregnancy period. Regardless, eclampsia without even a trace of hypertension with proteinuria has been shown to happen in 38% of cases revealed in the Unified Kingdom.[3] Likewise, hypertension was missing in 16% of cases surveyed in the Unified States.[4]

The clinical appearances of maternal toxemia are hypertension and proteinuria regardless of existing together fundamental irregularities including the kidneys, liver, or blood. There is likewise a fetal indication of toxemia including fetal development limitation, decreased amniotic liquid, and unusual fetal oxygenation.[3] HELLP disorder is a serious type of toxemia and includes hemolytic iron deficiency, raised liver capability tests (LFTs), and low platelet count.

Most instances of eclampsia present in the third trimester of pregnancy, with around 80% of eclamptic seizures happening intrapartum or inside the initial 48 hours following conveyance. Interesting cases have been accounted for before 20 weeks' incubation or as late as 23 days' post pregnancy. Other than early discovery of toxemia, no solid test or side effect complex predicts the improvement of eclampsia. In created nations, many detailed cases have been delegated inevitable.

2. MATERIAL & METHOD

The present study was carried out in the Department of Obstetrics and Gynaecology, Amaltas Institute of Medical Sciences, Dewas, M.P, it is a prospective study. The study period extended from May 2020 to April 2021.

Selection of Cases

The patients were selected from patients who were admitted to as emergency cases in labour room patients were irrespective of age and parity. On a specially designed proforma for this study, the patient particulars like detailed obstetric history, examination and laboratory findings were recorded; were studies.

Inclusion Criteria

All cases of pre eclampsia and eclampsia admitted in the Department of Obstetrics & Gynaecology.

All proven cases of eclampsia (Hypertension, albumin and convulsion)

All the cases of imminent eclampsia.

Exclusion Criteria

Known case of epilepsy.

Convulsion occurring as a complication of uremia

Convulsion or coma due to cerebral disease, eg. Encephalitis, meningitis, cysticercosis, ruptured cerebral Aneurysm.

3. RESULTS

Table – 1: Distribution of cases according to Diagnosis.

Diagnosis on admission	No. of Cases	Percent	No. of Death	Percentage mortality
Preeclampsia	60	31.58	06	12
Eclampsia	130	68.42	12	8.84
Total	190	100%	18	9.21%

Table – 2: Distribution of Preeclampsia & eclampsia cases according to Diastolic Blood Pressure (mmHg)

Diastolic Blood Pressure (mmHg)	Preeclampsia		Eclampsia	
	No.	%	No.	%
> 110	36	60.00	104	80.00
<110	24	40.00	26	20.00
Total	60	100%	130	100%

Table – 3: Distribution of cases on the basis of Total Serum Bilirubin (mg/dl) on admission.

Total Bilirubin (mg/dl)	Preeclampsia		Eclampsia	
	No.	%	No.	%
< 1.2	46	77.50	98	75.38
> 1.2	14	22.50	32	24.62
Total	60	100%	130	100%

Table – 4: Complications in Preeclampsia and Eclampsia

Complications	Preeclampsia (N=60)		Eclampsia (N=130)	
	No.	%	No.	%
Abruption	23	38.3	22	16.9
DIC	01	1.7	01	0.7
ARF	02	3.3	13	10
MODS	00	0	02	1.5
CVA	01	1.7	01	0.7
Retinopathy	25	41.7	64	49.6
Shock	00	0	01	0.7
Shift to ICU	02	3.3	15	11.5
Died	06	10	11	8.4

4. DISCUSSION

In our review it is found that systolic pulse on affirmation was ended up being >150 mmHg. 70% of pre-eclampsia and 81.54% of eclampsia had systolic BP >150 mmHg. Ali BS et al (2004) [5] in their review had found the systolic circulatory strain on affirmation ended up being >160 mmHg in 60.5% and 66.7% of the Toxemia and eclampsia bunches separately. In our review Table it is found that diastolic pulse on affirmation was ended up being >110 mmHg in 60% of Toxemia and 80% of eclampsia patients[8].

Ali BS et al (2004) [5] in their review had found the diastolic pulse on affirmation ended up being >110 mmHg in 49.1% of Toxemia and 48.5% of eclampsia patients. In this study found all out bilirubin was > 1.2 mg/dl in 22.50% of Toxemia and 24.62% of eclampsia patients.

Liu et al (1998) [6] review, 20.6% of patients with extreme Toxemia had strange liver capability tests, primarily the height of SGPT. Expansion in serum bilirubin was seldom seen.

Cunningham FE et al. (2001) [7], accept that extreme hyperbilirubinemia is remarkable in Toxemia and eclampsia.

Ali BS et al (2004) [5] had noticed a bilirubin esteem > 5 mg/dl in 0.6 and 12.1% of pre-eclamptic and eclamptic patients separately.

5. CONCLUSION

Eclampsia is an ongoing challenge for the whole medical community, the root of which lies in the soil of illiteracy, poverty and poorly implemented health care system. Eclampsia is associated with significant maternal and perinatal morbidity and mortality. In majority of pre-eclampsia and eclampsia patients systolic blood pressure on admission was more than 150 mmHg and diastolic blood pressure was more than 110 mmHg. Serum Urea and creatinine was found to be within normal limit in majority of pre-eclampsia and eclampsia patients.

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