



STUDY OF SEIZURES IN PREGNANCY.

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ABSTRACT

Seizures may occur during pregnancy for the first time or recur in a female who is a known epileptic. Seizures occurring during pregnancy, delivery and in puerperium have more serious impact over the maternal and fetal outcome. Seventy four pregnant women, who presented with seizures for the first time during their pregnancy were taken up for study. It was found that antepartum eclampsia is the leading cause of seizures during pregnancy and it predominantly occurs in primi parous women. Factors like elevation in systolic BP, recurrent episodes of seizures, altered sensorium influence perinatal mortality, whereas prolonged alteration of sensorium and abnormal neurological examination following antepartum seizures indicates poor maternal prognosis in terms of mortality & morbidity

KEYWORDS : Seizures, pregnancy, eclampsia**INTRODUCTION**

Seizures may occur during pregnancy for the first time or recur in a female who is a known epileptic. Seizures occurring during pregnancy, delivery and in puerperium have more serious impact over the maternal and fetal outcome. The etiology, pathophysiology and management of these seizures varies with the time of occurrence i.e. whether they occur during antepartum, intrapartum or post partum period (1,2).

Since they have an impact over maternal and fetal mortality it has become a major task for the physician / obstetrician treating the pregnant women with seizures and it becomes mandatory to have adequate knowledge about the various causes, treatment and prognosis assessment of seizures occurring during pregnancy(3,4).

METHODOLOGY**Study Design:**

Prospective, clinical, observational study

Setting:

Government Rajaji Hospital, Madurai

Materials:

Pregnant women admitted with first seizure during their third trimester were included. Pregnant women admitted with past history of seizures / known epileptics presenting with recurrences were excluded.

Parity status is defined as

Primigravida - one who is pregnant for the first time

Primipar - one who has delivered one viable child.

Multigravida- one who has previously been pregnant, she may have aborted or have delivered a viable baby.

Multipara: one who has delivered two or more children

Details regarding Name, age, parity, status, paresis, type of seizures, number of seizures, seizures during previous pregnancy, family history of seizures, other existing illness, pregnancy induced hypertension (PIH) detected prior to admission and associated symptoms like headache, fever, altered sensorium, visual disturbances and weakness were taken elaborately. Blood pressure was recorded. Level of consciousness at the time of admission was noted and detailed neurological examination was done. Level of consciousness was taken as abnormal when the patient was in stupor (difficult to arouse) or coma (un arousable). Fundus changes were taken as abnormal when feature of

papilledema was present. Plantar response was noted as abnormal when it was extensor.

CT Brain was taken for all the patients who presented with seizures. Neuroimaging reports were included wherever it was done and provisional diagnosis as to the cause of seizure was made.

Pregnancy outcome of all these patients including mode of delivery, maternal and fetal outcome were noted.

Treatment modalities given to control the seizures, as well as drugs given to treat the etiology were also noted.

RESULTS

A total number of 74 pregnant women, who presented with seizures for the first time during their pregnancy and admitted in labour ward, Govt. Rajaji Hospital, Madurai were taken up for the present study.

Analysis:

In our study, 74 pregnant women developed seizures for the first time during their pregnancy.

Following characteristics of the cases were analysed:**1. Age:**

In this group of women, age varied from 18-25 years and their mean age was 23.03 years and S.D.: 3.89

2. Parity:

Seizures were predominantly seen in primiparous women (49/74) ie. 66.2%.

3. Type or seizures and number of seizures:

Among the 74 women in this group, 72 had GTCS (97.3%) and only 2 patients had focal seizures (2.7%).

The number of seizures ranged between 1-10 and the median and SD were 2.86 and 1.8 respectively.

4. None of the multiparous women had seizures during their previous pregnancy.

5. Family history seizures was present in only one patient

6. Out of the 74 patients, 2 had coexisting illnesses viz gestational diabetes complicating pregnancy, and portal hypertension with splenomegaly

7. Blood pressure:

Range Mean S.D

Systolic BP 80-220 156.89 26.11

Diastolic BP 60-150 101.51 5.29

8. Analysis of clinical symptomatology was done.

9. Neurological status Examination:

Out of the 74 patients, 28 had altered level of consciousness (37.8%), fundus changes were present in 20 patients (16 had hypertensive retinopathy changes and 4 had papilledema) and 32 patients had abnormal plantar response. (43.3%)

10. Etiological profile:

64 out of 74 patients had antepartum eclampsia. 6 had seizure disorder. 4 had miscellaneous causes like cerebral venous thrombosis(2), tuberculoma(1) and hypoglycemia(1).

11. Analysis of Maternal and fetal outcome shown in Table: 1

Table: 1 – Maternal and fetal outcome in antepartum seizures

	Alive	Dead
Maternal outcome	70 (94.6%)	4 (5.4%)
Fetal outcome	41 (55.4%)	33 (44.6%)

CONCLUSION

Antepartum eclampsia remains the leading cause of seizures during pregnancy and it predominantly occurs in primi parous women. Factors like elevation in systolic BP, recurrent episodes of seizures, altered sensorium influence perinatal mortality, whereas prolonged alteration of sensorium and abnormal neurological examination following antepartum seizures indicates poor maternal prognosis in terms of mortality & morbidity. Early detection and treatment of pregnancy induced hypertension is must to reduce the complications of PIH & to avoid maternal and fetal mortality.

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