RESEARCH PAPER | Medical Science | Volume : 5 | Issue : 2 | Feb 2015 | ISSN - 2249-555X

PREGNANCY COMPLICATIONS AND OUTCOMES IN WOMEN WITH EPILEPSY

KEYWORDS: Epilepsy, maternal complications, fetal complications

Dr.C.Sunitha	Dr. Radha Lakshmi*	Dr.M.Sofia Sowjanya
Assistant professor, Dept of Obstetrics & Gynaecology, Kurnool medical college, Kurnool	Associate professor, Dept of Obstetrics & Gynaecology, Kurnool medical college Kurnool *Corresponding Author	Post graduate, Dept of Obstetrics & Gynaecology, Kurnool medical college, Kurnool

ABSTRACT *Epilepsy is the most serious neurological disorder which requires intensive follow up. This is a prospective study for thirteen months i.e from January 2013 to January 2014 done at Kurnool Medical College and Government General Hospital, Kurnool. The present study is aimed to assess the maternal and fetal-out come in pregnant women with epilepsy.*

Introduction:.
Epilepsy is the most common serious chronic neurological condition ,with a prevalence of between 3 to 9/1000Pregnancies.most of those affected including women of child bearing age will require treatment with AEP to prevent seizures.,Few number of women present with seizures during antenatal period .In my study there is no way to quantify the effect of seizures frequency on out come[1].

Materials and methods: All patients with history of epilepsy who are admitted in antenatal wards were included in this study. The details like age at diagnosis, type of epilepsy, treatment (mono or poly therapy) were noted. Primary outcome noted are antenatal complications (anaemia, preeclampsia,PTL,PROM) and secondary outcome as fetal complications .

RESULTS : During the period of our study 13 months, 30 cases got admitted.

MATERNAL COMPLICATIONS;-
Anaemia(dimorphic)-10, PIH-1,Preterm labour-4,PROM-1

Congenital anomalies-2

FETAL COMPLICATIONS
No fetal complications-12 Cases,

IUGR -1,

Abortions-7 ,

Fetal distress-4,

Preterm labour-4 ,

PIH-2,

IUD-1 ,

Non immune hydropsfetalis-1 .

Given these findings and previous studies it seems that epileptic women required more care during pregnancy and the rate of maternal fetal and obstetrical complications are relatively high among them.

11 cases used tablet levipril , 11 cases used tab phenytoin , 3 cases used tab carbamazepine , 1 case used tab phenobarbitone & 1 cases used tab val proate as antiepileptic drugs.

POLYTHERAPY;- 3 cases

2 cases used phenytoin &phenobarbitone , 1 case used phenytoin &clobazamine.

METHODS :

This is prospective analytical study in KMC, Kurnool of AP.

From jan 2013 - jan2014.there are 9,000 deliveries.

among them 30 had epilepsy complicating pregnancy.

Cases suitable for inclusion are defined as pregnant women with proven epilepsy whether or not taking an anti epileptic drug either in monotherapy or poly therapy.

Excluded :antepartum eclampsia,CVA

Details collected - included epilepsy details→time of onset ,seizure type ,frequency ,drug history time at which last attack had occurred,no. of seziures medication taken or no type of medication.

	No.of cases	percentage
<20 yr	2	6.6%
20-35 yr	27	90%
>35 yr	1	3.3%

Common age group presented with epilepsy : Majority of cases (90%) are in the age group between 20-35 yrs. Among all the cases 16 cases, 53% are taking regular antenatal checkups. Rest are unbooked cases46% but taking treatment.

Type of presenting seizure

Volume : 5 | Issue : 2 | Feb 2015 | ISSN - 2249-555X

	No. of cases	Percentage
GTCS	20	66.6%
Focal	1	3.3%
Complex partial	9	30%

Twenty five patients were diagnosed at childhood(83.3%), the rest were diagnosed during pregnancy16.6%.

Cases with bad obstetric history
Seven cases (23.3%) had bad obstetric history in the form of deaths and abortions.

Type of drug therapy
Twenty seven cases had taken monotherapy and three cases had taken polytherapy.

Monotherapy

	No.of cases	Percentage
Phenytoin	11	36.6%
Levipril	11	36.6%
Carbamazepine	3	10%
Phenobarbitone	1	3.3%
Valproate	1	3.3%

Viz: monotherapy included phenytoin,levipril, phenobarbitone , carbamazepine, valproate 36.6%,36.6%,10%,3.3%,3.3%.

Polytherapy
Three cases used polytherapy in uncontrolled Generalised toinc clonic seizures.

Tab.phenytoin + Tab. Phenobarbitone – 2 cases.

Tab. Phenytoin + tab. Clobazam – 1 case.

DATA ANALYSIS:
outcomes classified as maternal& fetal

Maternal outcome: 4 cases underwent cesarean delivery in view of fetal distress . epilepsy or antiepileptic drugs perse are not risk factors for caesarean delivery2.

Antenatal complications
Maternal complications:

	No.of cases	percentage
Anaemia	10	33.3%
PIH	1	3.3%
Preterm labour	4	13.3%
PROM	1	3.3%
Congenital Anomalies	2	6.6%

Mode of delivery

	No.of cases	Percentage
Abortion	7	24%
Normal vaginal delivery	13	43.3%
Instrumental delivery	1	3.3%
Cesarean section	9	30%

Among 4 cases which underwent cesarean section indications were :

Prior cesarean section with CPD- 5 cases fetal distress – 3 cases Cephalo-pelvic disproportion – 1 case.

FETAL OUTCOME:-
Risk of congenital malformation: Anti epileptic drug taken during first trimester increases the major congenital malformation.[1] Poorly controlled epilepsy causes fetal malformations especially central nervous system maldevolpment.. maldevelopment of fetal CNS have genetic etiology that could be passed to offsprings of woman with epilepsy.[3] Adverse fetal outcomes is due to epilepsy per se but not due drug treatment. Frequent seizures during pregnancy potentially causes fetal damage.

Intra Uterine Growth Retardation – 1
Preterm Labour – 4
Abortions – 7
Fetal Distress – 4
Fetal Anomoly with Intra uterine Death – 1
Nonimmune Hydrops Foetalis -1
Fetal outcome
Total no. of live babies – 23

Among alive babies, term babies are 21 (84%). Preterm babies are 4(13%). IUGR1 (3%). Two cases of stillborn are with anencephaly and non immune hydrops

In this study maternal mortality associated with epilepsy complicating pregnancy is zero. Perinatal mortality rate : 2 cases were stillborn, 4 cases had NICU admission. 2 cases of congenital anomalies for which induced 2nd trimester abortions were done.

Children of epileptic woman have 10%risk of developing seizure disorder.

STATISTICAL ANALYSIS
Among 30 cases 27 women took monotherapy and 3 women took poly therapy.5 cases were first time diagnosed as epileptic during pregnancy between 4th and 5th month of gestation. Among them 1 case was given tablet valproate from 5th month of gestation.

Monotherapy outcomes:
RESULT a : phenytoin(11) b : levipril(11) c :carbamazepine(3) d: phenobarbitone(1) e: valproate(1)

	No complications	Fetal distress	IUGR	PIH	Preterm labour	Abortions	Non immune hydrops foetalis
Phenytoin	1	1	1	1	4	2	1
Levipril	9	2	0	0	0	0	0
Carbama-zepine	2	1	0	0	0	0	0
Pheno-barbitone	0	0	0	0	0	1	0
Valproate	0	0	0	1	0	0	0

Monotherapy exposure. Rate of preterm deliveries, spontaneous abortions, IUGR are seen more with tablet Phenytoin. Tablet levipril is associated with more cases without adverse fetal outcomes.

Volume : 5 | Issue : 2 | Feb 2015 | ISSN - 2249-555X

Polytherapy : among 3 cases 2 cases had taken tablet phenytoin and phenobarbitone 1 case taken phenytoin and clobazam resulted in normal babies without any adverse effects.,

CONCLUSION :

In my study of pregnancy complications and outcome in women with epilepsy,.Epilepsy is most common among 20 – 35 yrs of age (90%) with 53% of booked cases which had regular antenatal checkups. Most of them are presented with generalized toinc clonic seizures (66.6%) followed by complex partial (30%).83 % were epilepsy from their childhood with 70% of cases taking regular treatment and 16.6% were first diagnosed during pregnancy for which cause was unknown. 90% cases are taking monotherapy .33% cases were complicated with anaemia. 13.3% are with preterm labour.10% had induced 2nd trimester abortion for congeniatal anamolies were on tab.phenytoin as drug therapy.30 % underwent cesarean section. 6.6% had post partum complication of PPH. There was no associated maternal mortality. There is a adverse perinatal outcome in the form of stillborn babies (6.6%),Preterm labour(13%) with NICU admission and with poor APGAR (3.3%) and with IUGR(3.3%).

REFERENCE 1. De sweits medical disorders in obstetric practice, 5th edition; chapter 15 – neurological disorders in obstetric practice; pg : 384 – 390. | 2. Williams obstetrics, 23rd edition; chapter 55 – neurological and psychological disorders ; pg : 1166 – 1169. | 3. Harrisons manual of medicine, 18th edition ; chapter |