STUDY ON ETIOLOGY, CLINICAL PROFILE, MANAGEMENT, AND FOLLOW UP OF SEIZURES IN CHILDREN IN A TERTIARY CARE CENTRE IN THENI

ABSTRACT

INTRODUCTION: Acute seizures are a common neurological symptom in sick children. In patients with fever, they include febrile seizures [1,2], acute symptomatic seizures (e.g. in a child with pyogenic meningitis)[3] or initial seizures in a child with epilepsy or epilepsy syndrome[2]. Worldwide, febrile seizures are the most common type of acute seizures in children[4]. Most are associated with infections and have a good outcome [5]. In tropical countries, febrile seizures are common but the prevalence of acute symptomatic seizures (which have a poorer outcome) may be higher than Western countries [6-8]. The incidence of both acute seizures and febrile status epilepticus is higher[2,9] and the outcome is worse since the etiology is different[6,8,10,11]. Acute seizures are therefore a major risk factor for neurological and cognitive impairment [12-14] and for the development of epilepsy [15-17] in children living in these regions.

AIM:- To point out the various etiologies and to study the clinical profile of seizure disorder in children >2 months to <12 yrs of age.

PRIMARY OBJECTIVE:- To know the etiology, pattern, precipitating factors, control and follow up of seizures in children between 2-12 yrs of age admitted in a tertiary.

SECONDARY OBJECTIVE:- To follow these cases for a minimum period of 6 months to report any change needed in the current treatment protocol.

MATERIALS & METHODS

STUDY AREA Department of Pediatrics, Govt. Theni Medical College, Theni.

INCLUSION CRITERIA All Children admitted for seizure between age 2-12 yrs.

EXCLUSION CRITERIA Children < 2 months or >12 yrs of age. Children with Simple febrile seizure disorder

STUDY DURATION April 2014 to March 2015

Children being admitted to the pediatric department of G.T.M.C.H, Theni either in P.I.C.U or ward for the complaints of seizure disorder >2 to < 12 yrs of age, were examined after getting duly informed consent from the parents. Past history of seizure, birth history, family history and developmental history were mainly included into the study, rather many more criteria were also examined which have been included in the proforma. Thorough clinical examination will be done, including the neuroimaging, EEG findings and CSF examination if necessary. Etiology will be determined taking into consideration the risk factors any significant natal or ante natal history, birth history, family history of seizure, positive examination findings and examination reports.

The seizure will be classified according to the pattern of seizure and acute episodes will be treated. The children will be follow up for 6 months after being discharged to determine the recurrence of seizure episodes during that period.
Data will be compiled in excel software and will be analyzed for etiology, topographical pattern, precipitating factors, control and their follow up.

CONCLUSION: SD was found to be the most common cause in children from 2mths to 12 yrs. Atypical febrile SD was the 2nd most common cause. Symptomatic seizure was found in rest cases. Symptomatic seizure included meningitis, encephalitis, metabolic & electrolyte abnormalities, HTN & SOL. Amongst SOL tuberculoma, NCC, Pineal gland tumor was found to be common. Most of the population were from rural areas and were not having good transport facilities, as the prolongation of the seizure will lead to SE and more worse outcome. Only 34.8% were educated compared to rest, and were more concerned about the diseased state of the child. NCM was found only in 52.4% cases showing a very great incidence of consanginious marriage in this region. Family history of seizure was also found to be significant. Fundus examination gives lots of clues including disc oedema, blurring of disc margins & should be done in all cases. Diagnosis should be done after stabilizing the patient’s general condition. Detailed history, examination and investigations should be taken into consideration before arriving to a diagnosis. GTCS was found to be most common but any seizure in infants, 2mths to 18 mths, focal, associated with fever should be treated vigorously including CSF examination. SVP showed to be most promising as low as 10mg/kg. PB should be replaced by SVP in all children more than 1yrs of age with a regular follow up of LFT. Lastly patients should be followed up regularly to watch for improvement or deterioration & should be intervened quickly.

Keywords: consanginious, seizure, pyogenic, tuberculoma