AN UNCOMMON PRESENTATION OF COMPLEX PARTIAL SEIZURE

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Introduction

Discharges arising in the limbic system of the temporal lobe give rise to temporal lobe epilepsy with one form of partial seizure of complex symptomatology. The seizure could involve a psychic, motor or autonomic behavioural pattern. The frequency of temporal lobe epilepsy in childhood is often underestimated since the psychic elements of the attack may be overlooked in a child. We report a case of temporal lobe epilepsy with only psychiatric manifestation.

Case Report

11-years-old male child first reported to outpatient clinic of ENT department with complaints of giddiness and vertigo. The description of these symptoms was in the form of episodes lasting for few minutes. There was no preceding illness. Detailed assessment including vestibular functions did not reveal any abnormality. The child and parents were reassured and asked to report if symptoms persist. Child was reviewed two days later for persisting symptomatology. Additional symptoms of abnormal behaviour, disorientation to time and place were also reported. During these episodes it was observed that the boy was unresponsive to all commands. Reexamination did not reveal any abnormality. In view of lack of clinical clues, the child was hospitalised for observation. Review of history did not give any clues. Detailed clinical examination was normal. During the period of stay, the episodes became very frequent and lasting longer. The abnormal behaviour was secondary to hallucinations in the form of threatening phrases being heard. He appeared visibly frightened, often running out of the ward and fighting against parents and caregivers in order to escape. Disorientation, unresponsiveness and amnesia lasting for few minutes would follow these episodes.

Investigations: Hb 11g/dl, total leukocyte count 7400/cmm, blood sugar 90 mg/dl, SGOT 180IU/l, SGPT 70IU/L, Serum electrolytes normal, CSF-cytology normal, sugar 52 mg/dl, protein 20 mg/dl & culture sterile. Antimycobacterial antibody in CSF and serum were negative. Japanese B encephalitis and herpes simplex was excluded by appropriate CSF studies. EEG revealed abnormal record suggestive of right fronto-centro-temporal dysfunction. CT scan brain and MRI brain were essentially normal. Psychiatric assessment excluded the possibility of psychosis.

Keeping the possibility of complex partial seizure with pure

psychic symptomatology, the boy was started on sodium valproate. In 48 hrs the child showed improvement and over the next seven days all symptoms were minimal in nature. With increase of dosage of sodium valproate to 30 mg/kg/day, the child was asymptomatic at the end of second week. He is under regular follow up in the seizure clinic.

Discussion

Complex partial seizures are usually paroxysmal episodes of relatively short duration, generally without precipitating factor starting and ending abruptly, while the reverse is true for psychiatric disturbance [1]. Stereotyped repeated events are likely to be epileptic in contrast to the more chronic and varied disturbances seen with some personality disorders [1]. The possibility of a temporal lobe seizure is often raised in a child with behaviour problems who has an abnormal electroencephalogram. Literature reveals that one half of children with behaviour problems have an abnormal EEG and in 27% of all patients there were EEG foci primarily involving the temporal lobe [2].

In the present case, the child had affective and perceptual disturbances with aggressive, walking and wandering activity as the predominant manifestation. These components have been reported to be least common in temporal lobe epilepsy [2]. Some affective-psychic seizures though involving complex distortion of perception of time, self and surrounding may cause only subtle changes in consciousness reduction in awareness and responsiveness. Vertigo is another uncommon feature of this disorder. A non-specific group of 20% of cases show no structural abnormality on CT Scan [3-5]. Though psychiatric disturbances are sometimes attributed to temporal lobe epilepsy on quiet inadequate grounds and minor EEG abnormalities, the prompt clinical response to anticonvulsant drug further substantiates the diagnosis in the present case.

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