Evaluation of Seizure Semiology and EEG Findings in Neurologically Normal Children with First Unprovoked Seizure

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Background: Seizures are a very common neurologic condition among the pediatric population. Unprovoked seizures in children can be classified into two types: generalized and partial. Electroencephalogram (EEG) is an essential investigation in children who have experienced their first unprovoked seizures.

Objective: To evaluate common seizure semiology and electroencephalogram (EEG) findings in neurologically normal children who presented with their first unprovoked seizure.

Settings: Bahrain Defence Force Hospital, Bahrain.

Design: A Retrospective Study.

Methods: One hundred nine patients, 3–14 years of age, who presented with their first unprovoked seizure from January 2017 to January 2018 were included in the study. Patients' clinical information and EEG results were obtained by using a computerized database.

Results: Seventy-three (67%) patients presented with generalized seizure and thirty-six (33%) patients presented with partial seizures. Abnormal EEG was found in forty-eight (44%) patients.

Conclusions: Generalized seizure was the most common seizure presentation in neurologically normal children who presented with first unprovoked seizure. Nearly half of these patients exhibited abnormal EEG findings.

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