A clinical study of syndromes of idiopathic (genetic) generalized epilepsy.

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Abstract

OBJECTIVES: Epidemiologic data concerning idiopathic generalized epilepsies (IGEs) are scarce or often unreliable. In the current study, we specifically analyzed the syndromes of IGE based on their demographic, clinical, and EEG findings to determine if other than the seizure type(s) and age of onset, there are any other distinctive features to distinguish these syndromes of IGEs from one another.

MATERIALS AND METHODS: In this retrospective study, all patients with a clinical diagnosis of IGE were recruited at the outpatient epilepsy clinic at Shiraz University of Medical Sciences, from 2008 to 2011. Demographic variables and relevant clinical and EEG variables were summarized descriptively. Statistical analyses were performed using Chi square and Fisher's exact tests.

RESULTS: 2190 patients with epilepsy were registered at our epilepsy clinic and 442 patients (20.2%) were diagnosed as having IGE. Age of seizure onset was 12 ± 7 years. Juvenile myoclonic epilepsy was the most frequent syndrome, followed by epilepsy with generalized tonic-clonic seizures only and juvenile absence epilepsy. Epilepsy risk factors, physical examination, MRI and even EEG could not differentiate various syndromes of IGE.

CONCLUSION: The key element in making the correct diagnosis of an IGE syndrome is obtaining a detailed clinical history. However, other than the seizure type(s) and age of onset, there are no any other distinctive features to distinguish these syndromes of IGEs from one another. Besides, sometimes these syndromes have overlapping features.