Summary

Introduction. Juvenile myoclonic epilepsy (JME) is a common idiopathic, generalised epileptic syndrome. It is characterised by myoclonic jerks which usually occur on awakening. Eighty percent of patients also have generalised tonic-clonic seizures and 30% have absence seizures. The characteristic EEG pattern is a generalised polyspike/spike-wave complex. Sodium valproate has been the drug of choice, 80-90% of patients become seizure-free.

Objective. The purpose of this paper is 1) to discover the reasons for delayed JME diagnosis and 2) to point out the danger of aggravation of seizures as a consequence of inappropriate drug choice.

Material and method. Fourteen patients with JME were studied. In all cases, neurological examination, MMSE, EEG and brain CT/MRI were performed.

Results. The mean age at onset was 14.7 years, range 8-23 years. The mean age at JME diagnosis was 22.2 years. Typical attack triads occurred in 7 patients (50%), grand mal seizures and myoclonic jerks in 4 patients (28.5%), absence seizures and myoclonias in 3 patients (21.5%). All patients had precipitating factors (sleep deprivation, alcohol, photosensitivity, fatigue, menstruation). EEG revealed generalised spike or multiple spike-slow wave paroxysms in 13 patients (92.8%) and focal abnormalities were recorded in 3 patients. The most common reasons for misdiagnosis were: inappropriately obtained interview, misdiagnosis of myoclonic jerks as simple partial seizures, misdiagnosis of absence seizures as partial complex seizures, or focal EEG abnormalities. Exacerbation of seizures was observed in 2 patients treated with VGB and 2 patients treated with CBZ and TGB. In one case, a series of myoclonic jerks appeared.

Discussion. The clinical features were similar to those found in other studies except for higher frequency of typical triad attacks in our patients. Despite of its characteristic clinical and electroencephalographic features, JME is under- and misdiagnosed. Failure to recognise JME results in inappropriate treatment and may cause aggravation of seizures.

Key Words: Juvenile myoclonic epilepsy – Myoclonic jerks – Seizure precipitants – Electroencephalography – Drug-induced seizures

Received September 23, 2003