



كلية الطب – جامعة الفيوم
قسم الأطفال

البحث الخامس

Comparative Study on Infantile Spasms in Upper and Lower Egypt

EC Neurology 10.5 (April, 2018): 373-379

مكان وتاريخ النشر:

Abstract

Background: Infantile spasms (IS) are unique disorder of infancy and early childhood. The average age at onset is 6 months and the average incidence is approximately 0.31 per 1000 live births. Awareness of IS is globally increasing in the majority of Egyptian provinces. Early diagnosis and early initiation of treatment has a favorable prognosis. The study compares between different possible etiology, clinical presentation, imaging and outcome of cases with IS in Lower Egypt and Upper Egypt. It also highlights the response of spasm to early initiation of Vigabatrin (VGB).

Patients and Methods: 117 cases of IS presented in the first year of life were retrospectively reviewed. They were divided into two groups according to their residence as Upper Egypt and Lower Egypt group. History, clinical data, EEG, brain imaging and response to antiepileptic drugs were compared between the two groups.

Results: Upper Egypt group (Group 1) comprised 24 cases (20.5%) and Lower Egypt group (Group 2); 93 cases (79.5%). Consanguinity was 75% in group 1; and 45% in group 2. Microcephaly was encountered in 50% of cases of group 1 and in 25% in group 2. Brain MRI abnormalities were detected in all cases (100%) in group 1 and in 77.4% of cases in group 2 (abnormalities included increased signal intensity, ventriculomegaly, agenesis of corpus callosum and cortical dysplasia). Evidence of hypoxic ischemic encephalopathy was present in 75% in group 1 and 25.8% in group 2. EEG showed hysarrhythmia/modified hysarrhythmia (75% in group 1 and 45% in group 2). Focal epileptogenic discharges were recorded in 12.5% in group 1 and 22.6% in group 2. Molecular studies identified two mutations in Lower Egypt group; CDKL5 and KCNO2.

Conclusion: Increasing awareness in primary health care providers regarding IS will result in better seizure control and psychomotor development. We strongly recommend initiation of VGB in treatment of IS for better and faster control of seizures. Molecular studies for cases with IS may help in better prediction of outcome and subsequent prenatal diagnosis.