Etiological analysis of epilepsy in children

Eiji Oka, Harumi Yoshinaga, Katsuhiro Kobayashi, Tomoyuki Akiyama, Hotaka Ohta

Department of Child Neurology, Okayama University, Okayama, Japan

Purpose: A population-based neuroepidemiological survey of childhood epilepsy was carried out in Okayama Prefecture on December 31, 1999 as the prevalence day. We analyzed the presumptive causes in this survey to clarify the causes of childhood epilepsy in the general population. Method: The population under 13 years of age in Okayama Prefecture on the prevalence day was 250,997. The list of children with epilepsy was collected from the medical records of 84 hospitals and clinics in and around Okayama prefecture. 2,222 cases were identified and the prevalence rate was 8.9 per 1,000. Results: 1) The types of epilepsy in the 2,222 cases consisted of localization-related epilepsy (76.8%), generalized epilepsy (22.2%), undetermined epilepsy (0.1%) and unclassified epilepsy (8.8%). 2) Presumptive causes were identified in 878 cases (39.5%), and unknown etiology was found in 1,344 cases (60.5%). 3) Predisposition towards convulsion or epilepsy within second degree relatives was found at 19.6%. 4) Prenatal causes consisted of genetic neurological diseases (0.8%), chromosomal aberration or malformations (1.9%), cerebral dysgenesis (2.3%) and intrauterine infection (0.1%). 5) Perinatal causes consisted of premature birth with low birth-weight (4.5%), neonatal asphyxia or abnormal delivery (5.0%). 6) Postnatal causes consisted of encephalitis or meningitis (2.5%), intracranial hemorrhage or vascular disorder (1.2%) and head trauma (0.7%). Conclusion: These findings indicate the etiological distribution of childhood epilepsy in the general population.

Community-based support activity for social independence for people with epilepsy and mental retardation as a base of community support club named as AKARI

Shin-ichi Yoshioka¹, AKARI Group²

¹Department of Neuropsychiatry, Faculty of Medicine, Tottori University, Yonago, Japan ²Branch of Tottori Prefecture of Japanese Epilepsy Association

The need for community-based social support services for individuals with epilepsy and mental retardation is increasing. The branch of Tottori Prefecture of Japanese Epilepsy Association cooperatively opened the community club named as “AKARI” to the disabled themselves in Yonago, Tottori Prefecture in Japan at March 3, 2001. The start of the establishment of AKARI begins for the participation of inmate and attendance of the disabled institution for mental retardation in the convention of Japanese Epilepsy Association held on 1996. Thereafter, the “AKARI group” by the participation of the consumers was established by the disabled themselves, and the volunteer group named as “Sunflower” with the aim of support and society activity and self rearing of the disabled was established. After the establishment of the community-activity space named as “Satoko Sanchi no Yasashii Heya” formed at 1998, the opportunity which the disabled participated in the regional society. Using the community club of AKARI, the loading and employment support of the disabled and the communication of information on the disabled problem to the region have been carried out. These independence support activities of individuals with epilepsy and mental retardation based at AKARI were accepted as a civil movement in the region. Therefore, we will report the activities of AKARI after the establishment and consider the independence support activity of the disabled including epilepsy. In addition, we want to carry out the interchange between “AKARI group” and people of Asia and Oceania Epilepsy Association.