SEIZURE DISORDERS

DEVELOPMENT AND BEHAVIOR FOLLOWING FIRST FEBRILE SEIZURE

Investigators at New York Presbyterian Hospital determined the effect of a first febrile seizure (FS) on development, using measures of cognition, motor ability, and adaptive behavior. Children (n=159) from a low socioeconomic environment, evaluated within one month of the ED visit for a first FS and one year later, showed no difference in performance compared to that in 142 controls. Within-group differences in cognition occurred in cases and controls, the decline in cases reaching significance. Factors independent of the FS that were associated with group changes in function and delay in developmental milestones over time included poor socioeconomic status, TV watching, fewer books, and lack of breastfeeding. The mean decline over time in cognition was greater in children with complex FS compared to children with simple FS, and children with complex FS were more likely to come from low-income households. Simple FS occurred in 65.8% (N=104), and complex FS in 34.2% (N=54). (Leaffer EB, Hinton VJ, Hesdorffer DC. Longitudinal assessment of skill development in children with first febrile seizure. Epilepsy Behav 2013 Jul;28(1):83-7). (Response: Dr Hesdorffer. E-mail: dch5@columbia.edu).

COMMENT. The authors conclude that a first FS does not pose an increased risk of poor developmental outcome over time, but a decline in cognition and behavior following a FS may be associated with an impaired socioeconomic environment or a FS that is complex in type.

NEUROPSYCHOLOGICAL IMPAIRMENT AND ROLANDIC EPILEPSY

Investigators at Universities of Chieti and Salerno, Italy, evaluated the neuropsychological profile of children with rolandic epilepsy (RE) at onset and of their healthy siblings. A significant impairment in language, attention, and short- and long-term memory but no impairment in visual-spatial memory was found in both patients and siblings. Verbal comprehension and working memory scores showed a positive correlation in both groups, supporting the hypothesis of a specific neurocognitive phenotype and shared genetic susceptibility in RE. (Verrotti A, Matricardi S, Di Giacomo DL, Rapino D, Chiarelli F, Coppola G. Neuropsychological impairment in children with Rolandoic epilepsy and in their siblings. Epilepsy Behav 2013 Jul;28(1):108-12). (Dr S Matricardi. E-mail: sara.matricardi@yahoo.it).

COMMENT. Early recognition of the neuropsychological impairments in patients with RE should be useful in addressing educational needs and IEP resources for patients.