

## SEIZURE DISORDERS

### **HIPPOCAMPAL ABNORMALITIES AND SEIZURE RECURRENCE**

Hippocampal volumetry and T2 relaxometry were performed on 84 consecutive patients (adolescents and adults) with partial epilepsy submitted to antiepileptic drug (AED) withdrawal after at least 2 years of seizure control, in a study at State University of Campinas-UNICAMP, Brazil. Ages ranged from 15 to 76 years (mean, 30 years), and follow-up varied from 5.6 to 11.2 years (mean, 8 years). Hippocampal atrophy was present in 39 (46%) patients; bilateral in 13 and unilateral in 26. Age at time of scanning, age at seizure onset, and duration of epilepsy were similar in groups with and without HA. Seizure recurrence was more frequent in patients with HA (29/39, 74%) than in those with normal hippocampal volumes (21/45, 47%). Abnormal T2 relaxation times were found in patients with more pronounced HA, and with seizure recurrence. (Cardoso TAM, Coan AC, Kobayashi E et al. Hippocampal abnormalities and seizure recurrence after antiepileptic drug withdrawal. *Neurology* July (1 of 2) 2006;67:134-136). (Reprints: Dr Fernando Cendes, Departamento de Neurologia, Faculdade de Ciências Médicas-UNICAMP, Cidade Universitária Zeferino Vaz, Campinas SP, Brazil, CEP 13083).

COMMENT. The probability of seizure remission for 5 years after AED withdrawal is 62% in patients without HA, 28% in those with HA, 62% with normal T2 signal, and 23% with abnormal T2 signal. Hippocampal atrophy and hyperintense T2-weighted signal are the MRI abnormalities commonly found in patients with mesial temporal lobe epilepsy. MRI is of value in predicting outcome following AED withdrawal, particularly in patients with HA.

In an editorial, Berg AT and Engel J Jr (*Neurology* 2006;67:12-13) point out that the study does not clarify whether the effects of HA are independent of age at onset, and history of febrile seizures. The relation between HA and a diagnosis of mesial temporal lobe epilepsy was not determined in this series of patients.

### **HOT WATER EPILEPSY**

The clinical and electroencephalographic findings for 25 patients with seizures precipitated by hot water bathing (HWE) were analyzed by researchers at Sisle Etfal Education Hospital, Istanbul, Turkey. In a retrospective review of records of the epilepsy outpatient clinic since 1995, the age at onset of HWE patients ranged from 6 months to 37 years (mean age, 13 years), 52% having their first seizure in the first decade. Male-female ratio was 3:1. Three (12%) had a history of febrile seizures, and 11 (44%) a family history of epilepsy, none of the family members having HWE. HWE patterns were complex partial (CPS) in 20 (80%), secondary generalized in 10 (40%), and primarily generalized tonic-clonic in 5 (20%). Seventeen (68%) had seizures only precipitated by bathing; 8 (32%) had spontaneous seizures also. CPSs were manifested by staring, confused speech, déjà vu, faint feeling, taste of soap, nausea, vomiting, pleasurable feeling including orgasm, and visual and auditory hallucinations. Nine (36%) patients self-induced the seizures by either increasing the temperature of the water, or by increasing the amount of water poured on the head. Pouring the water over the head (11 patients), the temperature of the water (9 patients), and