had complex partial seizures. This case points to both a migraine and seizure origin for the visual hallucinations. (Lennox WG. *Epilepsy and Related Disorders*. Boston: Little, Brown, 1960; Vol 1, p 270). EEG is recommended if CBS develops in a patient with worsening of neurological signs (Ossola M et al. Epileptic mechanisms in Charles Bonnet syndrome. **Epilepsy Behav** 2010 May;18(1-2):119-122).

## **SEIZURE DISORDERS**

## ICTAL EPILEPTIC HEADACHE WITH IDIOPATHIC EPILEPSY

Neurologists at the University of Rome, Italy report a 37-year-old woman with drug-resistant generalized epilepsy and headache who had a sudden headache during a 24-h EEG that displayed epileptic activity. Generalized S/W discharges and polyspike and wave discharges persisted for 60 min until the headache disappeared. The case represents a rare example of ictal epileptic headache in generalized idiopathic epilepsy. (Fanella M, Fattouch J, Casciato S, et al. Ictal epileptic headache as "subtle" symptom in generalized idiopathic epilepsy. **Epilepsia** 2012 March;53(4):e67-e70). (Respond: Dr Carlo Di Bonaventura, Department of Neuroscience, Neurology Unit, "Sapienza" University of Rome, Viale dell'Universita 30, 00185 Rome, Italy. E-mail: c\_dibonaventura@yahoo.it).

COMMENT. In the authors' opinion, "ictal epileptic headache" warrants listing in the international classification of both epilepsy and headache. This case report is a rare example of the entity.

## **RISK OF EPILEPSY AFTER FEBRILE SEIZURES**

Investigators at the Institute of Neurology, London, and at other centers in the UK and the Netherlands conducted a prospective follow-up of 181 infants from the onset of febrile seizures for a median of 21.6 years, to estimate the long-term risk of developing epilepsy. Of these, 175 (97%) were seizure-free in the preceding 5 years, and 171 (94%) were seizure-free and off antiepileptic drugs. Six percent developed epilepsy. In total, 17 (7.7%) had afebrile seizures, of whom 14 (6.4%) had 2 or more afebrile seizures (epilepsy). The mean time to the second afebrile seizure was 5.7 years. At 20 years after the index febrile seizure, 6.7% had developed epilepsy. The risk of developing epilepsy in the cohort over the whole follow-up period was 10 times that of the general population. The standardized incidence ratio was significantly elevated in the 0- to 14-year age groups but not in the 15- to 19-year age group. The risk of developing epilepsy in people who had febrile seizures appears to decrease with time. A history of 4 or more febrile seizures is a risk factor for development of epilepsy. (Neligan A, Bell GS, Giavasi C, et al. Long-term risk of developing epilepsy after febrile seizures. A prospective cohort study. Neurology 2012 April 10;78:1166-1170), (Response and reprints: Prof Sander. Email: I.sander@ucl.ac.uk).

COMMENT. In this study, no differentiation was made between simple and complex febrile seizures. The association between febrile seizures and later epilepsy is

linked to 3 possibilities: 1) febrile seizures are the first manifestation of epilepsy; 2) they are an age-specific marker of inherent susceptibility to seizures, and 3) prolonged febrile seizures (complex FS) may damage the brain with consequent increased risk of seizures. (Vestergaard M et al. **Am J Epidemiol** 2007;165:911-918). In the Collaborative Perinatal Project, 1% of children with simple febrile seizures had developed epilepsy by age 7 years. In children with complex febrile seizures, the risk was 9.2%, and in the total cohort, the risk was 2%. In children with no febrile seizures, the risk is 0.5%. The risk of epilepsy at 7 years of age in children with simple febrile seizures is two times higher, and in those with complex febrile seizures it is 18 times higher than in children with no febrile seizures. (Nelson KB, Ellenberg JH. **Pediatrics** 1978;61:720-727).

**Febrile seizure inheritance and SUD in toddlers.** SUD in 6 toddlers reported from Children's Hospital, Boston was associated with an autosomal dominant inheritance of febrile seizures, and with hippocampal abnormalities in one of 3 autopsied cases. The autosomal dominant pattern of inheritance for febrile seizures in affected families was identical to that observed in genetic epilepsy with febrile seizures plus and familial febrile seizures. Febrile seizure may be a marker of a process that leads to SUD, and seizure may or may not be directly involved. Genetic markers are needed to identify febrile seizure patients at risk of SUD. (Holm IA et al. **Pediatr Neurol** 2012 April;46:235-239).

## **READING EPILEPSY RESPONSE TO ANTICONVULSANTS**

Investigators at the Department of Neurology, Vanderbilt University Medical Center, Nashville, TN report 3 patients with reading epilepsy, a boy aged 14 years, a 26year-old male, and a 27-year-old woman, 2 having an excellent response to levetiracetam. The boy had tremors in the jaw and tongue when reading silently, and these progressed into loss of consciousness and generalized jerking if reading was continued. These episodes did not occur when reading aloud, skimming material, or doing mathematics. Video-EEG showed bifrontal synchronous sharp waves or spike-and-wave complexes, occasionally becoming generalized with left predominance. MRI was normal. He was treated effectively with divalproex sodium. Tremors did not recur when divalproex was inadvertently discontinued at 3 years after seizure onset, and at 6-year follow-up he was still seizure-free and on no medication. The 2 adults had twitching of the right lips or "mouth jumping" while reading. One had a video-EEG-monitored, generalized tonicclonic seizure with left fronto-cental predominance, resistant to lamotrigine and controlled with levetiracetam; the other had a complex partial seizure with left mesial temporal sclerosis. Following left amygdalohippocampectomy, the reading epilepsy was partially controlled with carbamazepine and fully controlled with levetiracetam. Levetiracetam is proposed as first-line treatment for primary and secondary reading epilepsy. Spontaneous medication-free remission of primary reading epilepsy may occur within 3 years of seizure onset. (Haykal MA, El-Feki A, Sonmezturk HH, Abou-Khalil BW. New observations in primary and secondary reading epilepsy: excellent response to levetiracetam and early spontaneous remission. Epilepsy Behav 2012 April;23:466-470). (Respond: Dr BW Abou-Khalil, E-mail: bassel.abou-khalil@vanderbilt.edu).