

limbic encephalitis is suggested (Sakuma H et al, **Pediatr Neurol** 2010;43(3):167-172). In 10 children with unexplained encephalitis presenting with encephalopathy and status epilepticus, reported from Sydney, Australia, elevated voltage-gated potassium channel antibodies (VGKC Ab) were detected in 4/10 compared to only 1/69 controls. VGKC Abs are associated with limbic encephalitis in adults and in 4 children in the current study from Germany. Morales L et al (**Pediatr Blood Cancer** April 2011;[Epub ahead of print]) of the University of Chicago report a child who developed limbic encephalitis associated with anti-Hu antibodies, 6 years after her initial diagnosis of neuroblastoma and opsoclonus-myoclonus. Long-term follow-up of patients with opsoclonus is advocated.

BEHAVIORAL DISORDERS

BEHAVIORAL SYMPTOMS IN CINGULATE GYRUS EPILEPSY

Clinical and behavioral manifestations of cingulate gyrus epilepsy in 3 young adults are reported from the Epilepsy Center, University of Texas Southwestern Medical Center, Dallas. All 3 had MRI confirmed left antero-cingulate lesions, and seizures were controlled after lesionectomy. Two patients had auras of intense fear and laughter without mirth associated with cingulate gyrus epilepsy, and all 3 had hyperkinetic behavior and ictal vocalization consistent with frontal lobe epilepsy. The third patient described a “freezing” aura. Behavioral changes in 2 patients involved aggression, personality disorder, paranoia, and poor judgment postictally, sometimes lasting for days and socially destructive. One patient, a commercial pilot, as a passenger he was running uncontrollably up and down the aisle of the plane, resulting in emergency landing. Another patient was arrested for threatening security officers; a normal interictal EEG had previously led to the diagnosis of nonepileptic spells and a psychiatric personality disorder. Aberrant behaviors in all 3 patients completely resolved after lesionectomy.

The antero-cingulate gyrus is part of the Papez circuit that includes the hippocampal-mammillothalamic tract. The circuit has 3 functional subdivisions: premotor, affect division controlling emotion, and cognitive division involved in memory. In the 1989 proposed epilepsy classification, the ILAE Commission included cingulate epilepsy as a type of frontal lobe epilepsy. The present case report also includes in the cingulate epilepsy definition 1 or more of the following symptoms: a seizure with laughter without mirth, a sense of fear at the beginning of the seizure, or striking behavioral or personality changes lasting for weeks. Neuroimaging is useful in lesional cases but interictal EEG is usually nonspecific. (Alkawadri R, Mickey BE, Madden CJ, Van Ness PC. Cingulate gyrus epilepsy. Clinical and behavioral aspects, with surgical outcomes. **Arch Neurol** Mar 2011;68(3):381-385). (Respond: Rafeed Alkawadri MD, Epilepsy Center, 551 Cleveland Clinic Foundation, 9500 Euclid Ave, Cleveland, OH 44195. E-mail: droraf81@gmail.com).

COMMENT. “Fear” and automatisms at seizure onset are also familiar in children with complex partial seizures. In the proposed revised ILAE terminology (Berg AT et al. **Epilepsia** 2010;51(4):676-685), cingulate gyrus epilepsy may be classified as a “constellation” of symptoms or epilepsy with structural lesion. .