

Hospital, Vancouver, BC, Canada. SSMA seizures were characterized by bilateral tonic posturing of upper or lower extremities, preserved consciousness, and no postictal confusion. Sensory auras, speech arrest, and abnormal vocalization were frequent symptoms. Ictal EEGs showed abrupt generalized attenuation of background activity and diffuse beta activity, followed by theta or delta frontal activity or generalized rhythmic midline slowing. Interictal recordings were normal in 50%. Delayed cognitive development occurred in 3 patients. One patient had tuberous sclerosis and one had a hypothalamic hamartoma. Brain imaging was normal in the remaining 10 patients. Seizures were responsive to AEDs in 50% of cases. (Connolly MB et al. Seizures involving the supplementary sensorimotor area in children: A video-EEG analysis. Epilepsia October 1995;36:1025-1032). (Reprints: Dr K Farrell, Division of Neurology, Department of Pediatrics, University of British Columbia, British Columbia's Children's Hospital, 4480 Oak St, Vancouver, BC, Canada V6H 3V4).

COMMENT. Supplementary SM seizures in adults with surgical lesions are described by Penfield W and Jasper H in their classic "Epilepsy and the Functional Anatomy of the Human Brain," Boston, Little Brown, 1954. In one patient with a scar in the right posterior frontal region adjacent to the longitudinal sinus, attacks were ushered in by a sensation in the left foot. This was followed by turning of the head and eyes to the left, raising of the left hand and tonic posturing of both legs. Clonic movements followed. There was no loss of consciousness unless a generalized seizure occurred. Attacks in children are similar to those described in adults. Diagnosis is often difficult because of frequent normal interictal EEG and subtle ictal EEG abnormalities. Repeated video/EEG recordings may be required to establish a clear electroclinical pattern.

#### VAGAL NERVE STIMULATION FOR REFRACTORY EPILEPSY

The tolerance and efficacy of periodic left vagal nerve (VN) stimulation in 12 children with medically intractable epilepsies are reported from the Sections of Neurology and Neurosurgery, Children's Mercy Hospital, Kansas City, MO. At 2 to 14 months follow-up, 5 patients had a better than 90% reduction in number of monthly seizures, and the overall status of the child was improved on global evaluation ratings. Antiepileptic drugs were reduced after VN stimulation in 4 patients. No serious adverse effects were noted. Several patients experienced transient coughing with initial activation of the stimulator, and some had vocal hoarseness. Credit card inactivation occurs when the activating magnet is stored in the same pocket with the card. The therapeutic response to VNS appeared to be superior and was achieved more rapidly in children than in adults. (Murphy JV et al. Left vagal nerve stimulation in children with refractory epilepsy. Preliminary observations. Arch Neurol September 1995;52:886-889). (Reprints: Dr Murphy, Section of Neurology, Children's Mercy Hospital, 2401 Gilham Rd, Kansas City, MO 64108).

COMMENT. The advantages of vagal nerve stimulation compared to AEDs in children with refractory seizures were listed as follows: 1) no deterioration of response, 2) no allergic rashes, 3) no cognitive deficits, 4) no drug interactions, and 5) complete compliance. The device was well tolerated and free of serious complications. See Progress in Pediatric Neurology II, 1994, pp132-3, for further reports on vagal nerve stimulation for control of epilepsy.