

COMMENT. Countermeasures involving sensory stimulation for the treatment of Jacksonian seizures have been advocated for centuries, dating back to the time of Galen and Aretaeus. Brown-Séquard (1872) proposed an encircling blister and Gowers (1901) found that forcing the closed fingers to open or preventing a leg from flexing would break up a motor march (quoted in Lennox WG. Epilepsy and Related Disorders Vol 1, 1960, Little, Brown & Co, Boston). The value of these methods in the treatment of other seizure types should be explored further.

BEHAVIORAL COMPLICATIONS OF FRONTAL LOBE SEIZURES

A 13-yr-old girl with marked behavioral and selective cognitive deficits associated with partial complex seizures of frontal lobe origin is reported from the Depts of Neurology, Psychiatry and Pediatrics, Harbor-UCLA Medical Center, 1000 W Carson St, Torrance, CA. Behavioral deterioration consisting of inattention, sexual disinhibition, loss of concern for personal hygiene, physical and verbal aggression and periodic incoherent and bizarre speech, was concurrent with a 6-week history of seizures manifested by turning to the right, staring, picking at her clothes, shaking and urinary incontinence. An EEG showed periodic bursts of 2½ Hz spike and slow wave complexes originating in the left frontal lobe. CT and MRI of the brain were normal. Neuropsychological testing for frontal lobe dysfunction (finger tapping, digit span, trailmaking, WISC-R mazes, Stroop test) demonstrated deficits in attention, response inhibition, alteration between tasks, maze solving, word generation and motor functioning. Overall intelligence, basic language skills, visual perception, constructional ability and remote memory were spared. Seizures were controlled, the EEG became normal, and the cognitive and behavioral deficits disappeared within one month after treatment with carbamazepine. On re-examination, the patient was composed, quiet and well groomed, and the content of her speech was appropriate, including memory and expression of shame regarding her behavior during preceding months. (Boone KB et al. Neuropsychological and behavioral abnormalities in an adolescent with frontal lobe seizures. Neurology April 1988; 38: 583-586).

COMMENT. This case-report suggests that frontal lobe seizures and interictal dysfunction may be associated with acute psychiatric disturbance in children. Whereas this patient exhibited remarkable reversible behavioral and cognitive defects without an underlying structural cerebral lesion, in some adults with destructive and selective frontal lobe pathology neuropsychological testing has failed to demonstrate behavioral deficits. It is possible that the seizure activity in the present case may have spread to involve areas in addition to the frontal lobe.

SEIZURES DURING EXERCISE

Three children with epileptic seizures occurring during exercise are reported from the Section of Electroencephalography and Pediatric Neurology, Mayo Clinic, Rochester, MN. Epileptiform paroxysms were noted with exercise but not with hyperventilation during EEG recordings in these patients. The pathophysiologic mechanism was unclear. (Ogunyemi AO et