

## **PSYCHOGENIC STATUS EPILEPTICUS**

Six (21%) of 29 children admitted to the Columbus Children's Hospital, OH, in a 6-month prospective period, with a diagnosis of convulsive status epilepticus proved to have psychogenic status epilepticus and comorbid affective and anxiety disorders. All "seizures" were resistant to antiepileptic drug therapy, and video EEG monitoring documented the nonepileptic nature of the attacks. Ages ranged from 9 to 15 years. All had normal intelligence, and most had a family or personal history of epilepsy. Psycho-therapeutic and -pharmacological interventions were successful, despite some family denial and resistance, the disorder resolving in 1 year or less. (Pakalnis A, Paolicchi J, Gilles E. Psychogenic status epilepticus in children: psychiatric and other risk factors. Neurology February 2000;54:969-970). (Reprints: Dr Ann Pakalnis, Section of Neurology, Children's Hospital, 700 Children's Drive, Columbus, OH 43205).

**COMMENT.** Risk factors for nonepileptic status epilepticus in these patients included comorbid anxiety or depression, a personal or family history of epilepsy, and stressful environmental factors (parents' divorce, move, or loss of employment, school problems, and death of a grandparent). Goals of treatment include avoidance of iatrogenic complications from aggressive misdirected antiepileptic therapy, recognition and therapy of comorbid psychiatric disorder, removal of guilt feelings by counseling, and improvement of family support systems.

**Negative emotions in children with newly diagnosed epilepsy** were investigated at the Wilhelmina Children's Hospital, Utrecht, The Netherlands. (Oostrom KJ, Schouten A, Olthof T et al. Epilepsia March 2000;41:326-331). Attributions of shame and guilt were evaluated in non-illness, illness, and epilepsy related situations in 36 children with epilepsy, aged 7-15 years, and 35 healthy control children. The test was given twice: soon after diagnosis, and 3 months later. Children with epilepsy and controls did not differ in their way of attributing shame and guilt, but both attributed more shame to incompetence due to epilepsy than that due to other illnesses. Epilepsy was viewed as different from other diseases, suggesting that a stigma is still attached to the diagnosis.

## **NEURO CUTANEOUS SYNDROMES**

### **BRAIN VOLUME AND INTELLIGENCE IN NEUROFIBROMATOSIS 1**

Brain morphology and neuropsychological functioning were examined in 52 children and adolescents with neurofibromatosis type 1 (NF-1), and findings compared with 19 controls, at the University of Texas MD Anderson Cancer Center, Houston, TX. Total brain volume and especially gray matter, by quantitative MRI, was significantly greater for NF-1 subjects than controls, and the difference was more pronounced in younger subjects. The volume of gray matter in NF-1 patients was correlated with the degree of learning disability and a greater discrepancy between academic potential (IQ) and performance (academic achievement). A significantly greater regional corpus callosum size in NF-1 subjects was associated with diminished performance in tests of academic achievement and visuo-spatial and motor skills. (Moore BD III, Slopis JM, Jackson EF et al. Brain volume in children with neurofibromatosis type 1. Relation to neuropsychological status. Neurology February 2000;54:914-920). (Reprints: Dr Bartlett D Moore III, Division of Pediatrics (Box 87), University of Texas MD Anderson Cancer Center, 1515 Holcombe Blvd, Houston, TX 77030).

COMMENT. NF-1 can be associated with macrocephaly and learning disabilities, possibly related to a delay in developmental apoptosis and appropriate neuronal connections.

The value of the NIH criteria for diagnosis of NF-1 in early childhood was examined in 1893 patients from the International Database and reported from the University of British Columbia, Vancouver, Canada. (DeBella K, Szudek J, Friedman JM. Pediatrics March 2000;105:608-614). The diagnosis is not always apparent in the first few years of life. The frequency of NF1 cases meeting the NIH Diagnostic Criteria by 1 year of age, 8 years, and 20 years, is 46%, 97%, and 100%, respectively. Cafe-au-lait macules, axillary freckling, Lisch nodules, and neurofibromas appear in that order. Patients with optic glioma are usually diagnosed by 3 years, and osseous lesions appear within the first year.

### ATTENTION DEFICIT DISORDERS

#### **CORPUS CALLOSUM IN ADHD CHILDREN AND THEIR SIBLINGS**

The global brain size and a midline area of corpus callosum were measured by MRI in 15 boys with ADHD (mean age 10 years) and compared with 15 healthy male siblings of children with ADHD of the same age. No significant differences occurred in the two groups, nor when compared to unaffected siblings of ADHD children. Development and size of the corpus callosum should not be used as a marker for ADHD. (Overmeyer S, Simmons A, Santosh J et al. Corpus callosum may be similar in children with ADHD and siblings of children with ADHD. Dev Med Child Neurol Jan 2000;42:8-13). Respond: S Overmeyer MD, Department of Child and Adolescent Psychiatry, Friedrich-Schiller-University, Philosophenweg 3-5, D-07740 Jena, Germany).

COMMENT. No differences are found between the corpus callosum size in ADHD children and their siblings, suggesting that corpus callosum changes reported in groups of ADHD patients are not responsible for the phenotypic expression of the syndrome. Previous studies have shown a smaller splenic area of the corpus callosum in ADHD children compared to normal controls. Also, a smaller total cerebral volume, a loss of the normal right>left asymmetry in the caudate nucleus, smaller right globus pallidus, smaller right anterior frontal region, smaller cerebellum, and reversal of the normal (L>R) lateral ventricular asymmetry. (see Progress in Pediatric Neurology III, PNB Publ, 1997;pp212-3).

#### **PERSISTENT MOTOR DEFICITS IN DAMP**

Motor control in ability to perform everyday and spare-time activities was assessed at 11 to 12 years of age in 10 boys with deficits in attention, motor control and perception (DAMP) and compared with a group of 20 boys without DAMP. The study group had been diagnosed with DAMP at 5 to 8 years of age. Individually, the boys with DAMP had a significantly higher total score on a Movement Assessment Battery, indicating poor motor performance, than the boys without DAMP (p<.001). None participated in team sports, and their choice of everyday and spare-time activities were different from normal. No improvement in motor control with age was observed in boys with DAMP. (Christiansen AS. Persisting motor control problems in 11- to 12-year-old boys previously diagnosed with deficits in attention, motor control and perception (DAMP). Dev Med Child Neurol Jan 2000;42:4-7). (Respond: Annette S Christiansen, Physiotherapist, Institute for Health