Epidemiology of infantile spasms. Cumulative incidence of IS among Atlanta children is 2.9/10,000 live births. Among 10-year-olds with a history of IS, 83% are mentally retarded (MR), with no difference between cryptogenic and symptomatic cases. Of 10-year-olds with profound MR, 12% have a history of IS. Fifty percent of IS patients develop Lennox-Gastaut syndrome before age 11 years. (Trevathan E, Murphy CC, Yeargin-Allsopp M. The descriptive epidemiology of infantile spasms among Atlanta children. Epilepsia June 1999;40:748-751).

SEIZURE DISORDERS

OCCIPITAL EPILEPTIFORM DISCHARGES AND EPILEPSY

The frequency of different causes of occipital epileptiform discharges (OEDs) and EEG features predictive of epilepsy type and outcome were analyzed in 90 children with OEDs examined at the Floating Hospital for Children, Tufts University School of Medicine, Boston, MA. More than one half (56%) had seizures symptomatic of underlying illness, including cerebral palsy (18), cerebral dysgenesis (11), and genetic disorders (8). One third had idiopathic seizures, including 6 with benign childhood epilepsy with occipital paroxysms, 1 with febrile seizures, and 8 had no seizures. Only 2 had visual symptoms with seizures. Background slowing in the EEG was associated with symptomatic seizures in 87%; normal background EEG activity was present in 87% of those with idiopathic seizures ($p<0.001$). At follow-up in 72 cases, 62% (28 of 45) of those with normal EEG background had seizure remission compared to 37% (10 of 27) of those with background slowing ($p=0.04$). Generalized spike-wave discharges correlated with idiopathic epilepsy and a better prognosis. (Libenson MH, Caravale B, Prasad AN. Clinical correlations of occipital epileptiform discharges in children. Neurology July 1999;53:265-269). (Reprints: Dr Mark H Libenson, Division of Pediatric Neurology, New England Medical CVenter Box 330, 750 Washington Street, Boston, MA 02111).

COMMENT. Most epilepsies with occipital epileptiform discharges on the EEG are symptomatic and associated with developmental delay or severe behavior problems or both. A normal background rhythm or generalized spike-wave in the EEG correlates with idiopathic seizures and a better prognosis.

Early-onset benign childhood epilepsy with occipital paroxysms was identified by the necessary 5 diagnostic criteria in 19 of 649 children with localization-related epilepsies followed at the Tokyo Women's Medical College, Japan. An additional 22 exhibited all criteria except occipital EEG foci, and 21 lacked only ictal vomiting. Of a total of 57 patients, 74% were in remission by age 12 years. The remission rate was similar in those with or without ictal vomiting. The clinical spectrum of the syndrome is broad, and the diagnostic criteria require further clarification. (Oguni H et al. Epilepsia July 1999;40:1020-1030).

NEUROBEHAVIORAL DISORDERS

NEUROBEHAVIORAL RISK FACTORS IN SCHIZOPHRENIA

Neurobehavioral deficits in the offspring of schizophrenic parents compared to offspring of parents with no or nonschizophrenic mental disorder were analyzed in 65 Israeli adolescents enrolled in the Jerusalem Infant Development Study. Poor neurobehavioral functioning, assessed by a battery of neurologic and neuropsychological tests and psychiatric interviews, was found in 42% (10/24) of offspring of schizophrenic parents (73% of the male offspring),

compared to 22% (9/41) of offspring of nonschizophrenic parents. Poor psychiatric adjustment at adolescence was preceeded by problems at an earlier age. (Hans SL, Marcus J, Nuechterlein KH et al. Neurobehavioral deficits at adolescence in children at risk for schizophrenia. Arch Gen Psychiatry August 1999;56:741-748). (Reprints: Sydney L Hans PhD, Department of Psychiatry, MC3077, The University of Chicago, 5841 S Maryland Ave, Chicago, IL 60637).

COMMENT. Neurobehavioral signs in infants, children and adolescents may be markers of vulnerability to schizophrenia and poor global psychiatric adjustment. Risk factors for development of schizophrenia in offspring of schizophrenics include motor and sensorimotor behavior problems during the first year of life and poor motor and cognitive functioning during school age. Male offspring are more susceptible than girls.

Chromosome anomaly in autism and epilepsy. A 12-year-old boy with atypical autism and epilepsy had a maternally derived duplication of chromosome 15q11-q13. (Gurrieri F et al. Neurology May 1999;52:1694-1697).

ADHD CLINICAL FINDINGS IN FEMALES

Clinical correlates of attention deficit hyperactivity disorder in females were examined in 140 girls with ADHD and compared with 122 girls without ADHD in a study at the Massachusetts General Hospital, Boston. Compared to controls, girls with ADHD manifested more conduct, mood, and anxiety disorders, lower IQ and achievement scores, and more impairment on measures of social, school, and family functioning. Comorbidity findings and severity of intellectual impairments are similar to those in boys with ADHD. (Biederman J, Faraone SV, Mick E et al. Clinical correlates of ADHD in females: findings from a large group of girls ascertained from pediatric and psychiatric referral sources. J Am Acad Child Adolesc Psychiatry August 1999;38:966-975). (Reprints: Dr Biederman, Pediatric Psychopharmacolgy Unit, ACC 725, Massachusetts General Hospital, Fruit St, Boston, MA 02114).

COMMENT. With the exception of low levels of disruptive behavior, ADHD in girls has a spectrum of symptoms and comorbidity, with mood and anxiety disorders, and impairments in cognitive functioning, school achievement, social and family functioning, similar to those found in boys.

LANGUAGE-RELATED DEFICITS AFTER TEMPORAL LOBECTOMY

Five left temporal lobectomy school-aged children demonstrated significant language-related cognitive declines on post-operative neuropsychological testing at the Children's Hospital of Philadelphia, PA. Deficits involved verbal IQ, verbal learning, naming, and reading comprehension. They were clinically evident in 4 of the 5 patients, leading to impaired school performance. They were not identified by IQ testing alone. Three right temporal lobectomy patients showed no cognitive impairment after surgery. (Dlugos DJ, Moss EM, Duhaime A-C, Brooks-Kayal AR. Language-related cognitive declines after left temporal lobectomy in children. Pediatr Neurol July 199;21:444-449). (Respond: Dr Dennis J Dlugos, Division of Neurology, 6th Floor, Wood Bldg, Children's Hospital of Philadelphia, Philadelphia, PA 19104).

COMMENT. Preoperative and postoperative neuropsychological testing is recommended in children undergoing temporal lobectomy for epilepsy. Left temporal lobectomy may be complicated by language-related cognitive declines.