normal cognitive level. Control of seizures and abolition of SES are essential for cognitive recovery. Outcome is dependent on etiology. Patients with rolandic epilepsy and ESESS have the best prognosis, whereas those with ESESS caused by LKS or symptomatic epilepsy are usually impaired. Children with congenital hemiplegia, hydrocephalus, or thalamic injury with early onset epilepsy are at increased risk of ESESS, and should be carefully monitored. Surgery should be considered early in treatment of drug-resistant symptomatic ESESS.

In a series of 30 patients with ESES treated 1994-2007 in Tel Aviv, Israel, the syndrome evolved from benign partial epilepsy in 11 (37%), and another third had an underlying structural brain anomaly. The most effective AEDs were levetiracetam and clobazam, whereas valproate and ethosuximide were ineffective. Residual intellectual deficit correlated with duration of ESES. (Kramer U et al. **Epilepsia** 2009;50(6):1517-1524).

INFECTIOUS DISORDERS

LONG-TERM OUTCOMES OF ACUTE ENCEPHALITIS

Researchers at the Astrid Lindgren Children's Hospital and Karolinska Institute, Stockholm, Sweden, reviewed medical records of 71 of 93 children who were treated for acute encephalitis at 5 weeks to 17 years of age in 2000-2004, using questionnaires and a structured telephone interview conducted with the parents. Fifteen children with the most severe symptoms at time of discharge underwent EEG and tests of reaction time and working memory. Mean age at onset of encephalitis was 6.7 y (range 0-17) and time to follow-up evaluation was 5.4 y (range 3-8). Males outnumbered females 47 to 24 or 2:1. The cause was known in 37 (52%). Persisting symptoms were reported in 25 (60%) of 42 children >5 y of age and in 13 (45%) of 29 children <5 y of age. Symptoms resolved completely in 24 (34%) of 71 children (within 6 months in 21 children and by 1 year in 3). Residual symptoms were reported in 17 (40%) of 42 children >5 y of age and in 8 (28%) of 29 children <5 y of age at time of acute illness. The most common residual symptoms in the older group were personality changes, poor memory, noise sensitivity, and poor concentration, and poor concentration and feelings of frustration in the <5 y group. A confirmed/probable microbial cause was established in 52% of the children. Prevalence of persisting symptoms was similar in cases of known and unknown cause, and all agents were equally causative of persisting symptoms, even those considered benign. Factors indicative of a poor prognosis and persisting symptoms at follow-up included admission to ICU in acute phase, and fever, seizures, EEG abnormalities, and moderate/severe symptoms at discharge. Postencephalitic epilepsy developed in 7 (10%) children. Girls had a fivefold increased risk of epilepsy compared with boys ($P<0.05$). Children with seizures during the acute illness had an eight-fold increased risk of epilepsy ($P<0.05$). All children who developed epilepsy had abnormal EEG findings during acute encephalitis, and recordings were abnormal in 9 of 15 with repeat EEGs at follow-up. Cognitive testing showed better results with increasing age for reaction time but not for working memory. Children with encephalitis had slower reaction times than controls. (Fowler A, Stodberg T, Eriksson M, Wickstrom R. Long-term outcomes of acute encephalitis in childhood. **Pediatrics** Oct 2010;126:e828-e835). (Respond: Asa

Fowler MD, Neuropediatric Unit, Karolinska University Hospital, 171 76 Stockholm, Sweden. E-mail: asa.fowler@ki.se).

COMMENT. Recovery from acute encephalitis in children is incomplete in 66% and complete in 34% cases at long-term follow-up. Many of those considered fully recovered at discharge have persisting symptoms later. Those who recover completely do so within 1 year. Ten percent develop post-encephalitic epilepsy, and girls are especially vulnerable. In addition to EEG abnormalities, neurological and MRI findings at time of acute illness are predictive of outcome. (Lee WT et al. **Eur J Ped Neur** 2007;11(5):302-309)(Chen Y-J et al. **J Child Neurol** 2006;21:1047-1051).

ANTI-NMDA RECEPTOR ENCEPHALITIS AND PROLONGED NONCONVULSIVE STATUS EPILEPTICUS

A case of a 35-year-old woman with a 3 week history of headaches, short-term memory loss, and psychosis, diagnosed with anti-NMDA receptor encephalitis and ovarian tumor, is reported from the University of Rochester Medical Center, NY, and University of Pennsylvania Medical Center, Philadelphia. An EEG demonstrated nonconvulsive status epilepticus (NCSE). MRI showed hyperintensity in the right medial temporal lobe. Tests for viral and bacterial pathogens, including herpes simplex virus, were negative. CSF had an antibody for the NR1/NR2B heteromer of the NMDA receptor. Most AEDs were ineffective but propofol caused abrupt cessation of the rhythmic NCSE. Pentobarbital coma was required to maintain EEG-burst suppression and was continued for 5 months. IV immunoglobulin, cyclophosphamide, or rituximab were without effect. CTs and ultrasound of ovaries revealed only a cyst, but oopherectomy at 5 months uncovered an ovarian teratoma. Two weeks postoperatively she awakened, and within 4 weeks she was alert and conversant. At 5 weeks postoperativly, the EEG showed sleep-wake cycles and normal waking organization. Mild defects on naming and memory tests were present at 6 months follow-up, but no seizures had occurred. (Johnson N, Henry C, Fessler AJ, Dalmau J. Anti-NMDA receptor encephalitis causing prolonged nonconvulsive status epilepticus. **Neurology** Oct 2010;75:1480-1482). (Response and reprints: Dr Nicholas Johnson, 601 Elmwood Ave, Box 673, Rochester, NY 14642. E-mail: Nicholas.johnson@urmc.rochester.edu).

COMMENT. Anti-NMDA receptor encephalitis resistant to immonomodulatory therapies should be considered for oopherectomy, even when CT is not diagnostic of ovarian tumor.

DEMYELINATING DISEASES

PROGRESSIVE COGNITIVE IMPAIRMENTS IN CHILDHOOD AND JUVENILE MULTIPLE SCLEROSIS

The evolution of cognitive and psychosocial difficulties in a cohort of 56 MS patients compared with 50 healthy controls was studied by researchers at the University