

COMMENT. This study shows that adolescents with epilepsy can attend school and lead full lives but they may have problems with comprehension of reading material and with behavior. The value of the EEG in predicting poor reading ability has been demonstrated and the recognition of localized cerebral lesions by MRI would be of additional interest. Correlations of the behavior and reading ability with degree of seizure control and efficacy of anticonvulsants might be pertinent.

A follow-up study of intractable seizures in childhood is reported by Huttenlocher PR and Hapke RJ (*Ann Neurol* Nov 1990; 28:699-705) from the University of Chicago. There were no clear outcome differences related to seizure type except for a slightly worse prognosis in children with predominantly myoclonic seizures. A major finding of this study was the association between intractable seizures in childhood and mental retardation. The assumption that either seizures themselves or the anticonvulsant drugs may depress intelligence has prompted an increased interest in the effects of surgical treatment early in life. However, the reports of improvement in cognition after surgery are not well documented.

#### NEUROPATHOLOGY OF DEVELOPMENTAL DYSLEXIA

The brains of three women with dyslexia were examined at the Dyslexia Research Laboratory, Beth Israel Hospital, Harvard Medical School, Boston, MA. The findings were similar to those reported previously from the same laboratory in four men with developmental dyslexia. The planum temporale was symmetrical, multiple foci of cerebrocortical glial scarring were present in two, and all three cases showed brain warts, molecular layer ectopias, and focal dysplasia. Two women had primary brain neoplasms and two showed small angiomas. The microscopic abnormalities were dated to the periods of late neural migration and cortical maturation. A causal connection between the pathoanatomical findings and the cognitive disorder could not be established. However, it is postulated that the dyslexic individual begins with a familial predisposition to dyslexia which is expressed through a propensity to develop symmetrical temporal plana. The presence of many foci of microdysgenesis in the territory of perforating cortical arterioles suggests the possibility of a microangiopathic etiological process. (Humphreys P et al. Developmental dyslexia in women: Neuropathological findings in three patients. *Ann Neurol* Dec 1990; 28:727-738).

COMMENT. The authors invoke an immunopathogenic mechanism for the cortical scars and neuronal ectopias seen in their neuropathological studies of dyslexics. They cite systemic lupus erythematosus in the mother as a possible cause for the microvascular cerebral pathology in the dyslexic offspring. The multifocal microscopic myelinated scars demonstrated in the three dyslexic women subjects were considered similar to the cortical

lesions of systemic lupus erythematosus and supportive of an immunopathogenic mechanism for dyslexia.

### LANGUAGE DISORDERS

#### OUTCOME OF ACQUIRED APHASIA

The effects of age at onset, etiology, severity, and type of aphasia on the course and outcome were investigated in a group of 28 aphasic children at the Department of Neurology, University Hospital Rotterdam-Dijkzigt, the Netherlands. Head injury was the cause in eight patients with onset between 4 and 11 years, vascular diseases accounted for seven cases with age of onset between 3 and 13 years, infectious diseases were present in 5 patients with onset between 4 and 12 years, Landau-Kleffner syndrome occurred in six cases with onset at 4-6 years, and cerebral tumor was present in four patients 9-13 years of age. There was no difference in recovery for those children aged above or below 11 years. The very young children with Landau-Kleffner syndrome had a bad prognosis. Six of the eight children with head injury had a favorable outcome, in contrast to those with vascular or infectious disease. Only one of six children with Landau-Kleffner syndrome recovered completely despite normal CT scans. The severity and bilaterality of the lesions showed no significant relation to prognosis of the aphasia. The severity of the cerebral lesion was assessed using a rating scale for CT scans. Most of the children had not recovered completely one year after onset of the aphasia. Recovery was significantly different according to etiological categories. (Loonen MCB, van Dongen HR. Acquired childhood aphasia. Outcome 1 year after onset. Arch Neurol Dec 1990; 47:1324-1328).

COMMENT. In general the outcome of acquired aphasia in childhood is good after mild head injury and a poor outcome may be expected in aphasia due to infectious disorders or Landau-Kleffner syndrome. Bilateral lesions on CT scan are frequently found in patients with infectious and vascular diseases in which aphasia is associated with a poor outcome.

#### EEG IN LANDAU-KLEFFNER SYNDROME

The EEG was studied in five children with Landau-Kleffner syndrome at the Service de Neurologie I, Hôpital Central, Strasbourg, France, and Department de Neurologie C.H.U. Sart Tilman, Liege, Belgium. Day and nighttime EEG video monitoring was performed before and after each change of therapy. One hundred EEGs of 30 minute to two hour duration were recorded on awake patients. Sleep EEGs were obtained during five spontaneous daytime naps, 15 naps induced by amitriptyline, and 65 complete nights of sleep. Spike-wave duration was measured as a percentage of the total sleep period. The EEG in waking patients showed focal and generalized spike-wave discharges on a normal background rhythm. During sleep, discharges increased and bilateral spike-waves occurred more than 85% of the sleep period. The abnormal EEG and the impairment of higher cognitive function developed and