sclerosis, congenital rubella); 2) idiopathic autism, with regression in the second year, prominent affective symptoms, and a more favorable prognosis. Idiopathic autism is characterized by a left-hemisphere serotonin deficiency, and is benefited by selective serotonin reuptake inhibitors (eg fluoxetine). Secondary autism caused by bilateral hemisphere damage has a poor prognosis, whereas idiopathic autism with a learning and memory deficit due to single hemisphere damage is compatible with higher functioning levels.

Brain weight in autism. The serotonin deficiency in autism, by permitting excessive branching of thalamocortical axons, may result in postnatal brain enlargement. Megalencephaly has been reported in some autopsied cases of autism, but a brief report of brain weights of 21 postmortem cases found the majority were normal, one micrencephalic, and only 3(15%) were megalencephalic (Courchesne E, Muller R-A, Saitoh O. Brain weight in autism: Normal in the majority of cases, megalencephalic in rare cases. Neurology March 1999;52:1057-1059).

Polydipsia in autism. The incidence of polydipsia in 49 autistic children was higher than in retarded children studied at the Noto Second Hospital, Ishikawa, Japan. (Terai K et al. Excessive water drinking behavior in autism. Brain Dev 1999;21:103-106). This finding suggests a hypothalamic-pituitary dysfunction in autism.

Placental insufficiency as a risk factor for early onset schizophrenia. Hultman CM et al, University of Uppsala, Sweden, report the association of small size for gestational age and bleeding during pregnancy as risk factors for early onset schizophrenia and affective psychosis in males. (BMJ 13 February 1999;518:421-426). This was a large population based, case-control study, including 167 patients with schizophrenia. The findings support the concept of environmental risk factors and prenatal or natal brain damage in some cases of early onset schizophrenia.

These articles and others in the adult literature, concerning the recent evidence for a neurological basis for autism and schizophrenia, are important to pediatric neurologists who will be consulted by child psychiatrists regarding the diagnosis and treatment of underlying neuropathology.

SEIZURE DISORDERS

AFFECTIVE DISORDERS IN INFANTILE SPASMS

Facial expression of affect in 28 children with intractable infantile spasms was studied longitudinally for 1.8 years after epilepsy surgery, at the Department of Psychiatry, Mental Retardation Research Center, UCLA, Los Angeles. The mean age at onset of spasms was 2.8 mos, surgery was performed at a mean age of 18 mos, and age at last follow-up was 40 mos. Surgery consisted of hemispherectomy in 11 and multilobar resection in 17. The Maximally Discriminate Movement Coding System (MAX) and Early Social Communication Scale (ESCS) were used for measuring discrete facial movement changes related to emotion. Epilepsy surgery was associated with a significant increase in the use of positive affect (surprise, astonishment, joy), irrespective of seizure, AE drug-related, and surgical variables. Children with a right hemispherectomy did not express more positive or negative affect than those with left hemispherectomy. At base-line and 1.8 yrs after surgery, a low rate of negative affect (sadness, anger, discomfort) was expressed. The lateralization (right hemisphere dominance) theory of emotional expression, and the valence theory (both hemispheres involved- left subserving positive emotion and right controlling negative affect) were not supported.

Intractable infantile spasms are associated with reduction in facial expression of positive affect and impaired use of positive emotion during social communication. (Caplan R, Guthrie D, Komo S, Shields WD, Sigman M. Infantile spasms: Facial expression of affect before and after epilepsy surgery. Brain Cogn March 1999;39:116-132). (Reprints: Rochelle Caplan, Department of Psychiatry and Behavioral Sciences, UCLA, 760 Westwood Plaza, Los Angeles, CA 90024).

COMMENT. In addition to the well known association of autistic behavior with infantile spasms, children with intractable spasms have a reduction in positive affect during social communication. The use of positive affect may be increased following epilepsy surgery, but the relation of this effect to the localization of brain pathology and functional plasticity of facial expression of affect requires further study.

The origin of hypsarrhythmia and tonic spasms in West syndrome is discussed in relation to the report of a 3-year-old girl with porencephaly and hydrocephalus with focal hypsarrhythmia from Tohoku University, Sendai, Japan (Haginoya K et al. Brain Dev March 1999;21:129-131). The left memisphere was completely defective, and hypsarrhythmia was seen over the residual right frontal cortex. Despite focal EEG findings, tonic spasms were symmetrical, and an intact brainstem appeared to be essential for the occurrence of spasms. An ictal SPECT showed hyperperfusion of the brainstem and cerebellum.

SUBPIAL RESECTION FOR LANDAU-KLEFFNER SYNDROME

Speech and language outcome of 14 children treated for Landau-Kleffner syndrome by multiple subpial transection was evaluated at Rush-Prebyterian-St Luke's Medical Center, Chicago. Language deficits presented at a mean age of 4 years, with a range of 3.0-6.5 yrs, and previous history of language and cognitive development was normal. The average age at time of surgery was 7.4 years, and the range was 5 to 13 years. Two patients had surgical complications; one developed meningitis and another suffered a stroke. Eleven (79%) had significant postoperative improvement in receptive and expressive vocabulary. The extent of improvement was inversely correlated with age of onset and age of surgery, and directly correlated with the time elapsed between surgery and the time of the most recent postoperative language evaluation. A control group was not available. (Grote CL. Van Slyke P, Hoeppner J-AB. Language outcome following multiple subpial transection for Landau-Kleffner syndrome. Brain March 1999;122:561-566). (Respond: Christopher Grote, Rush-Presbyterian-St Luke's Medical Center, 1653 W Congress Parkway, Chicago, IL 60612).

COMMENT. Landau-Kleffner syndrome is an acquired epileptic aphasia that develops in previously normal young children who lose previously acquired speech and language abilities. All patients selected for the study met these diagnostic criteria. The best predictor of language outcome following subpial resection was the amount of time elapsed between surgery and the time of language evaluation. In the absence of a control group, could these results be a function of the natural history of the disease? The following reports suggest that, although the Rush-Presbyterian experience is encouraging, controls may be needed to accurately evaluate the benefits of subpial resection.

Deonna T and associates of Lausanne, Switzerland, have reported an adult follow-up study of 7 patients with acquired epileptic aphasia beginning in childhood (Neuropediatrics 1989;20:132). Four showed no improvement, two were