syndrome. Relatively few investigators had stressed the importance of mesencephalic and rhombencephalic involvement in association with cerebral cortical dysgenesis until the work of Sarnat, colleagues and others in the 1990s. A classification of cerebral malformations proposed by Sarnat et al in 2004 also stressed the inclusion of thalamic, brainstem and cerebellar malformations in association with lissencephaly and holoprosencephaly. In an editorial, Dr Sarnat reviews the progress of our understanding of the genetic programming of neural tube development and the need for research on a genetic mechanism for the association of forebrain and hindbrain malformations in the lissencephalies. (Sarnat HB. Cortical malformations. Looking behind the cortex. Neurology 2009;72:394-395).

SURGICAL OUTCOME IN FOCAL CORTICAL DYSPLASIA

The predictors of surgical outcome and relevance of pathological severity were determined in 166 consecutive patients with intractable epilepsy and focal cortical dysplasias treated surgically at Konkuk University Medical Center, and National University Hospital, Seoul, Korea. Poor surgical outcome was associated with incomplete resection of epileptogenic area, mild pathologic features, and secondary tonic-clonic seizures. Patients with severe pathologic features had MRI abnormalities. MRI findings, EEG, PET and ictal SPECT were not associated with surgical outcomes. (Kim DW, Lee SK, Chu K, et al. Predictors of surgical outcome and pathologic considerations in focal cortical dysplasia. Neurology Jan 20, 2009;72:211-216). (Respond and Reprints: Dr Sang Kun Lee, Department of Neurology, Seoul National University Hospital 28, Chongno Ku, Seoul ,110-744, Korea. E-mail: sangunlee@dreamwiz.com).

COMMENT. Patients with focal cortical dysplasia and intractable epilepsy are at risk of a poor surgical outcome, when associated with incomplete resection, mild pathologic features, or secondary tonic clonic seizures. Incomplete resection of focal cortical dysplasia was the main predictor of poor postsurgical outcome in 149 pediatric patients operated at the Miami Children’s Hospital (Krsek P et al. Neurology 2009;72:217-223).

In practice, a negative MRI does not exclude a subtle cortical dysplasia that may underly refractory seizures. Newer imaging techniques may uncover small dysplasias amenable to treatment in specialized epilepsy and surgical centers. (Mathern GW. Neurology 2009;72:206-207).

VASCULAR DISORDERS

INTRACRANIAL ARTERIOPATHY AND ISCHEMIC STROKE

Repeated vascular imaging findings and clinical charts of 79 children with anterior circulation arterial ischemic stroke (AIS) and unilateral intracranial arteriopathy of the internal carotid bifurcation were studied at the University Medical Center, Utrecht, The Netherlands, and other centers in France, UK, and Canada. The characteristics of 5 (6%) patients with progressive and 74 (94%) with transient cerebral arteriopathy (TCA) were compared after a median follow-up of 1.4 years. Most infarcts were localized in the basal ganglia. Follow-up vascular imaging showed complete normalization in 23% of TCA.