

were the presenting manifestations in 54 (87%); 7 had a history of headache, and 5 had been treated for epilepsy. (Hladky JP et al. **Child's Nerv Syst** 1994;10:328-333; **Ped Neur Briefs** Sept 1994). AVMs were supratentorial in 41 (79%) and infratentorial in 11 (21%). The smaller the AVM, the higher the risk of hemorrhage, and the greater the need for early diagnosis and surgical resection. Postoperative angiography is recommended at 1 year after surgery to exclude recurrence, and after 5 years for diffuse AVMs.

SPONTANEOUS INTRACRANIAL ARTERIAL DISSECTION

A 14 year-old male with intracranial carotid artery dissection had transient neurologic symptoms and no antecedent illness or trauma, as reported from the University of Kentucky, Lexington. Diagnosis made by dynamic CT was confirmed by catheter arteriography. The dissection involved the supraclinoid segment of the left internal carotid. Vasculitis, prothrombotic states, and collagen defects were excluded as possible causes. (Robertson WC Jr, Given CA II. Spontaneous intracranial arterial dissection in the young: diagnosis by CT angiography. **BMC Neurol** 2006;6:16). (Respond: William C Robertson Jr: wcrobe2@email.uky.edu).

COMMENT. Occlusion of the supraclinoid segment of the internal carotid artery is a common arteriographic finding in children with acute hemiplegia. Associated disorders include pre-existing heart disease, trauma, CNS infection, sickle cell disease, and moyamoya disease, but a high proportion are idiopathic.

Traumatic vertebral artery dissection may present with vomiting, occipital headache, stiff neck, and ataxia. A review of 19 published cases found 1 died, 2 had residual quadriplegia, 9 had mild to moderate hemiparesis, ataxia, and/or dysarthria, and 7 (37%) recovered (Garg BP et al. Strokes in children due to vertebral artery trauma. **Neurology** 1993;43:2555-2558; **Ped Neur Briefs** Jan 1994).

TEMPORAL LOBE EPILEPSY

FACTORS PREDICTIVE OF SEIZURE OUTCOME IN NEW-ONSET TEMPORAL LOBE EPILEPSY

A community-based cohort of 77 children with new-onset temporal lobe epilepsy (TLE) were followed prospectively and reviewed at 7 and 14 years after seizure onset, and clinical, EEG, and neuroimaging findings and seizure outcome are reported from the Royal Children's Hospital and University of Melbourne, Australia, and Starship Children's Hospital, Auckland, New Zealand. Age at follow-up was a median of 20 years (range, 12 to 29 years), and the median follow-up period was 13.7 years. Of 62 patients completing the study, 19 (30%) were seizure free and off treatment, with no seizures for 5 to 15 years, while 43 had ongoing seizures or were treated surgically. MRI lesions identified in 28 patients with seizures included hippocampal sclerosis in 10, tumor in 8, and cortical dysplasia in 7. Focal slowing on the EEG was also associated with persistent seizures. Twenty one (75%) patients with positive neuroimaging studies underwent surgery, and 67% became seizure-free. Factors

not predictive of seizure outcome included infantile onset and family history of epilepsy. (Spooner CG, Berkovic SF, Mitchell LA, Wrennall JA, Harvey AS. New-onset temporal lobe epilepsy in children. Lesion on MRI predicts poor seizure outcome. **Neurology** Dec (2 of 2) 2006;67:2147-2153). (Reprints: Dr AS Harvey, Children's Epilepsy Program, Department of Neurology, Royal Children's Hospital (Melbourne), Flemington Road, Parkville, 3052, Australia).

COMMENT. Spontaneous remission of seizures occurs in one-third of patients with new-onset TLE. A lesion on MRI and focal slowing on EEG are predictive of refractory seizures and the need for surgical resection. Whereas 67% of TLE patients having MRI lesions became seizure free after surgical resection, only 53% of patients with negative neuroimaging became seizure free with medication alone, at 10 or more year follow-up. (Mathern GW, Trevathan E. Editorial. **Neurology** Dec 2006;67:2117-2118). Repeat neuroimaging may uncover developing lesions in 14% of patients with TLE, and prompt surgical evaluation and treatment.

ELECTROCLINICAL MANIFESTATIONS OF TEMPORAL LOBE EPILEPSY

The relationships between etiology, age at onset and electroclinical findings were examined in 77 children with temporal lobe epilepsy (TLE) reported from University of Verona, Verona, and Niguarda Hospital, Milan, Italy. Age at onset was < 3 years in 39 patients, 3 to 6 years in 17, and > 6 years in 21. Seizures began with staring, lip cyanosis, and oral automatisms; auras were more common after age 6 years. Video-EEG recordings documented seizures starting independently in both temporal lobes. Three subgroups of TLE were recognized: 1) Symptomatic TLE caused by cortical malformation or tumor; 2) TLE with mesial temporal sclerosis; and 3) cryptogenic TLE. Thirty two patients underwent surgical treatment. (Fontana E, Negrini F, Francione S et al. Temporal lobe epilepsy in children: Electroclinical study of 77 cases. **Epilepsia** Dec 2006;47:26-30). (Reprints: Dr Elena Fontana, Servizio di Neuropsichiatria infantile, Policlinico GB Rossi, P.le LA, Scurio, 108-37134 Verona, Italy).

COMMENT. Video-EEG recording of seizures is essential for correct diagnosis and localization of TLE in young children. In cases lacking neuroradiological correlation, a repeat video-EEG may be needed at follow-up. Wyllie E et al (**Epilepsia** 1993;34:859-868), in a previous electroclinical study of 14 children aged 16 months to 12 years, also demonstrated the value of video-EEG recordings in pre-surgical localization of the epileptogenic zone in children with TLE, especially in cases with mesial sclerosis and without tumor. In 9 with low grade neoplasms, the EEG findings were complex, including multifocal interictal sharp waves or falsely lateralized EEG seizure onset. An excellent surgical outcome is reported in 19 patients with mesial temporal sclerosis following prolonged complex febrile seizures and treated at the Montreal Neurological Institute (Abou-Khalil B, Andermann F et al. **Epilepsia** 1993;34:878). Ictal SPECT was superior to ictal EEG in localizing value in a study of 15 children with TLE, aged 7-14 years, at Royal Children's Hospital, Melbourne, Australia (Harvey AS et al. **Epilepsia** 1993;34:869).