diagnosis manifesting S/W activity for 85% of slow-wave sleep time, and found in 5% of the above series, atypical forms of BCECTS were uncommon. In contrast, comorbidities were frequent, and especially, ADHD, specific cognitive deficits, and behavior disorders.

HEADACHE DISORDERS

HEADACHE AND IDIOPATHIC EPILEPSY

Clinical characteristics of headache in 1,264 children with newly diagnosed idiopathic epilepsy were studied from 2006 to 2009 in five Italian Child Neurology University Centers. Seizures were generalized in 61 (tonic-clonic in 45) and partial in 69 patients (benign rolandic in 15). Of 130 children who showed an associated peri-ictal and/or interictal headache, 62% had post-ictal headache, 30% pre-ictal, and 57.6% inter-ictal headache. Rare cases of ictal epileptic headache ("migralepsy") were excluded. Pre-ictal, post-ictal, and inter-ictal headaches met criteria for migraine in 93%, 81.4% and 87%, respectively. Migraine without aura was most commonly associated with partial epilepsy, and occurred in 82% patients with peri-ictal headache and in 76.5% patients with post-ictal headache. Tension-type headache occurred in 19% patients. Focal epileptiform discharges in 39 children with partial epilepsy were frontal in 31%, temporal in 13%, and occipital in 41%. Peri-ictal headaches were post-ictal in 29 (74%) and pre-ictal in 10 (26%) patients with focal EEGs. Type of headache was not significantly correlated with localization of EEG abnormalities. (Verrotti A, Coppola G, Spalice A, et al. Peri-ictal and inter-ictal headache in children and adolescents with idiopathic epilepsy: a multicenter cross-sectional study. **Childs Nerv Syst** September 2011;27:1419-1423). (Address: Dr A Verrotti, Department of Pediatrics, University of Chieti, Italy).

COMMENT. This study confirms the prevalence of post-ictal headache associated with idiopathic epilepsy and an association of partial epilepsy with peri-ictal headache, most commonly migrainous. EEG is not routinely indicated in the evaluation of children with headache but may be appropriate in patients with atypical migrainous aura or episodic loss of consciousness. Several studies have addressed the utility of the EEG in children with headache, some concluding that a beneficial effect of anticonvulsant drugs in treatment of chronic migraine is not correlated with EEG epileptiform abnormalities. In 30 children with migraine studied in the 1970s and treated with the anticonvulsant, phenytoin, 77% had a decreased recurrence of headaches. The response rate was 61% in 13 patients with abnormal EEGs and 88% in 17 with normal EEGs, and the difference was not significant. Response to AED was independent of the EEG abnormality (Millichap JG. **Child's Brain** 1978;4:95-104). In an analysis of records of 257 children with chronic headache, the EEG showed epileptiform activity in 12% and slowing in 8%. (Kramer U et al. **Brain Dev** 1994;16:304-308).

The Cochrane Central Register of Controlled Trials of anticonvulsants in the prophylaxis of migraine in adults recorded 14 reported trials comparing AED with placebo in a total of 2024 patients: 4 trials with divalproex sodium, 2 sodium valproate, 3 topiramate, 2 gabapentin, and one trial each of carbamazepine, clonazepam, and lamotrigine. Sodium valproate/divalproex sodium and topiramate are effective in reducing migraine frequency and are reasonably well tolerated. Neither clonazepam nor

lamotrigine was superior to placebo. (Chronicle E, Mulleners W. **Cochrane Database Syst Rev** 2004;(3):CD003226).

ACUTE HEADACHE AND SICKLE CELL DISEASE

Researchers at Children's Hospital of Philadelphia and Children's Hospital of Michigan, Detroit, determined the frequency of acute care visits for headache in children with homozygous sickle cell disease (SCD-SS), neuroimaging studies, and associated CNS events. Of 2685 acute care visits by children with SCD-SS, 102 (3.8%) presented with headache as the chief complaint, and acute CNS events were diagnosed at 6.9% of these visits. Neuroimaging, performed in 42.2% of visits, identified acute CNS events in 16.3% of studies. Risk factors for acute CNS events that warrant confirmatory neuroimaging include older age, history of stroke, transient ischemic attack, or seizure, neurologic symptoms, focal neurologic exam, and elevated platelets. (Hines PC, McKnight TP, Seto W, Kwiatkowski JL. Central nervous system events in children with sickle cell disease presenting acutely with headache. **J Pediatr** September 2011;159:472-478). (Reprints: Dr Janet L Kwiatkowski MD, Children's Hospital of Philadelphia, 34th Street, Colkett Bldg, Room 11024, Hematology, Philadelphia, PA 19104. E-mail: Kwiatkowski@email.chop.edu.

COMMENT. The authors recommend neuroimaging in children with SCD-SS who present with acute headache and have associated neurologic symptoms, focal findings on exam and /or a history of stroke, transient ischemic attack, or seizure, or elevated platelet count. Consider imaging in patients with atypical headache, abnormal transcranial Doppler, vasculopathy on MRA, and/or silent infarcts.

AUTONOMIC HEADACHE

The features of headache attributed to autonomic dysreflexia after spinal cord injury (SCI) were determined by a literature search at the University of Toronto, Canada. Presenting features were sudden onset, severe throbbing headache, accompanied by increased blood pressure, altered heart rate, cutaneous vasodilation, hyperhidrosis and flushing cranial to the level of SCI, blurred vision, syncope, and anxiety. Triggers of the headache include bladder distension, constipation, sunburn, menstruation, and pulmonary infarct. (Furlan JC. Headache attributed to autonomic dysreflexia. An underrecognized clinical entity. **Neurology** Aug 23, 2011;77:792-798). (Respond and reprints: Dr Julio C Furlan, Toronto Western Research Institute, 399 Bathurst Street, Toronto, Ontario, Canada M5T 258. E-mail: jcfurlan@gmail.com).

COMMENT. Autonomic dysreflexia after SCI (at T6 or above) is characterized by initial low blood pressure and bradycardia, followed by volatile and episodic extreme hypertension, accompanied by headache and upper body flushing provoked by triggers. A triad of cephalalgia, hyperhidrosis, and cutaneous vasodilation occurs in 85% cases. The prevalence of SCI in children is 2.4/million and 25/million in adolescents, mainly car and motorcycle accidents. (Hagen EM et al. **Spinal cord** 2011;May 10. Epub ahead of print).