

## SEIZURES, FOCAL EEG ABNORMALITIES, AND CT

The prevalence and nature of abnormalities on CT associated with focal EEG abnormalities were evaluated in 964 consecutive children with epileptic and non-epileptic seizures seen over one year at the Royal Liverpool Children's Hospital, England. Of 157 (16%) children with a focus on the EEG, 83 had slow waves and 74 had spike or sharp wave foci. Of 121 with CT head scans, 26 (21%) scans were abnormal, and 81% of abnormalities were localized. Abnormal scans were uncommon in children with a single seizure, occurring in 8%. Frequency of abnormal scans in patients with delta foci (25%) was not significantly different from those with spike foci (17%). Focal neurological signs or partial seizures were predictive of abnormal scans. Focal CT findings prompted surgery in two patients with drug resistant partial seizures but lacking focal neurological signs; one had a parietal astocytoma, the other a frontal encephalocele. (Gibbs J, Appleton RE et al. Focal electroencephalographic abnormalities and computerized tomography findings in children with seizures. *J Neurol Neurosurg Psychiatry* April 1993; 56: 368-371). (Respond: Dr RE Appleton, Department of Paediatric Neurology, Royal Liverpool Children's Hospital, Eaton Road, Liverpool L12 2AP, England).

**COMMENT.** The authors advise CT in children with intractable partial seizures or lateralizing neurological findings or both, but not necessarily in all those with focal EEG abnormalities. Their findings suggest that no distinction should be made between delta and spike wave foci as criteria for CT and exclusion of neurosurgical lesion.

These results confirm a study of the electroencephalogram in 50 children with intracranial tumors and seizures reported from the Mayo Clinic (Millichap JG, Bickford RG, Miller RH, Backus RE. *Neurology* May 1962; 12: 329-336). A delta pattern occurred in 57%, and spike, sharp wave, or spike-and-wave seizure discharges were recorded in 32% of children with supratentorial tumors. The EEG was of localizing value in 21(88%) of 24 patients with tumors involving the cerebral cortex, and the accuracy of EEG localization was almost equal to that of pneumography. The value of the EEG in diagnostic differentiation of a brain tumor and a scar or microgyrus was less than its localizing value.

## SEIZURES INDUCED BY EYE CLOSURE

A case of a 19-year-old mentally-retarded female with an unusual form of seizures induced by eye closure is reported from the Universities of Toronto and Calgary, Canada. She developed drop attacks at age 2 years and eye fluttering seizures with altered consciousness soon afterwards. Generalized tonic-clonic seizures coincided with the introduction of valproic acid therapy at age 13 years. Clobazam controlled the grand mal, but multiple absence seizures and status persisted, despite trials with numerous antiepileptic drugs.