SEIZURE DISORDERS

INFANTILE LOCALIZATION-RELATED EPILEPSY

Videotaped seizures recorded from 23 infants aged 2 to 24 months with localization-related epilepsy were analyzed at the Cleveland Clinic, OH. Seizures were defined as localization-related (focal, local, partial) by localized ictal EEG or lesion on neuroimaging with seizure-free surgical outcome. Symptoms in 125 seizures were classified and correlated with the epileptogenic focus. "Hypomotor" seizures characterized by decrease in motor activity were localized to lesions in temporal, temporoparietal, or parieto-occipital regions (7 patients). Clonic, tonic, or atonic motor seizures, localized or generalized, originated in frontal, frontocentral, central, or frontoparietal areas (12 patients). Versive seizures arose from the contralateral occipital lobe (1), and infantile spasms from a frontal tumor (1) and temporo-parieto-occipital dysplasia (1). Seizures were classified in 22 infants. (Acharya JN, Wyllie E, Luders HO, Kotagal P, Lancman M, Coelho M. Seizure symptomatology in infants with localization-related epilepsy. Neurology Jan 1997;48:189-196). (Reprints: Dr E Wyllie, Pediatric Epilepsy Program, Cleveland Clinic Foundation, 9500 Euclid Ave, Cleveland, OH 44195).

COMMENT. Seizures characterized by lessened motor activity are localized to temporal or temporoparietal regions, whereas motor seizures, generalized or local, have their onset in frontal or central locations. Infantile spasms show no specific localization. Head turning during seizures in infants has no definite lateralizing value, but may originate in the contralateral occipital lobe or hemisphere.

Cerebellar hypometabolism in infantile focal epilepsy is reported from the Heinrich-Heine-University, Dusseldorf, and Bethel Epilepsy Center, Bielefeld, Germany. (Seitz RJ, Piel S, Arnold S et al. Cerebellar Hypometabolism in focal epilepsy is related to age of onset and drug intoxication. Epilepsia Dec 1996;37:1194-1199). The cerebellum of infants is vulnerable to repeated seizures and high dosage of antiepileptic drugs.