MALIGNANT ROLANDIC-SYLVIAN EPILEPSY

The diagnosis, treatment, and outcomes of seven children with a syndrome termed "malignant rolandic-sylvian epilepsy (MRSE)" are described following retrospective chart analyses of 24 patients who were studied with magnetoencephalography (MEG) and intracranial video-EEG (IVEEG) at The Hospital for Sick Children, Toronto, Canada. All had undergone surgical treatment for intractable localization-related epilepsy between 1997 and 2000. The seven children diagnosed with MRSE, ages 6-16 years, had common characteristics: refractory sensorimotor seizures (SMS), frequent frontocentrotemporal EEG spikes, normal MRI, rolandic-sylvian spike source on MEG, and cognitive deficits. Seizures had begun between 1 and 6 years of age, and were refractory to antiepileptic medications for more than 5 years. Subdural ECoG was required to lateralize and localize the epileptic zone before surgery. Cortical excision and multiple subpial transection controlled seizures completely in 3 and almost fully in 4, at 30 months' mean follow-up. Two had a worsening of attentional deficits. Analysis of excised tissue showed neuronal migration disorder in 3 and gliosis in 2. (Otsubo H, Chitoku S, Ochi A et al. Malignant rolandic-sylvian epilepsy in children. Diagnosis, treatment, and outcomes. Neurology August (2 of 2) 2001;57:590-596). (Reprints: Dr H Otsubo, Division of Neurology, The Hospital for Sick Children, 555 University Ave, Toronto, Ontario, M5G IX8, Canada).

COMMENT. The term *malignant rolandic-sylvian epilepsy* (MRSE) has been coined for a subgroup of patients with atypical benign rolandic epilepsy (BRE) and Landau-Kleffner syndrome (LKS) variant, and others with intractable sensorimotor seizures, EEG centrotemporal spikes, and cognitive impairment. MRSE differs from BRE and LKS in seizures that are refractory, secondarily generalized, and occurring in clusters. Intracranial video-EEG, neuropsychological testing, and MEG are important in diagnosis and surgical evaluation and treatment.

EFFECT OF FOOD ON ABSORPTION OF DILANTIN AND MYLAN XR

The effect of a high-fat meal on the absorption of 100-mg Dilantin Kapseals and 100-mg Mylan extended-release phenytoin sodium capsules was determined in a single-dose, two-way crossover study conducted at the University of Florida, Gainesville, FL. Bioavailability of Mylan administered with food was 13% lower than that of Dilantin Kapseals, an effect resulting in a median 37% decrease in plasma phenytoin and subtherapeutic levels in 46% of patients. Simulations of substituting Dilantin for Mylan result in a 15% increase in bioavailability, a median 102% increase in plasma phenytoin and toxic levels in 84% of patients. Food effect studies of bioavailability are important in FDA regulations regarding bioequivalence of phenytoin products. (Wilder BJ, Leppik I, Hietpas TJ et al. Effect of food on absorption of Dilantin Kapseals and Mylan extended phenytoin sodium capsules. Neurology August (2 of 2) 2001;57:582-589). (Reprints: Dr BJ Wilder, Department of Neurology and Neuroscience, University of Florida, 10530 NW 15th Place, Gainesville, FL 32606).

COMMENT. When administering phenytoin products with meals, the observed alterations in bioavailability may cause significant changes in therapeutic efficacy or toxicity. The substitution of Mylan, an extended phenytoin capsule, for Dilantin Kapseals can result in decreased phenytoin serum levels and impaired seizure control. The authors recommendations to prevent unintended alterations in PHT concentrations when switching products include the following: