only. Experience with rectal phenobarbital and phenytoin is limited. (Graves NM, Kriel RL. Rectal administration of antiepileptic drugs in children. Pediatr Neurol 1987; 3: 321-326).

COMMENT. This practical and informative article emphasizes the usefulness of the rectal route of administration of antiepileptic drugs in children. The method is particularly applicable for use in the home by parents of children with acute recurrences of refractory epilepsies and as prophylaxis for febrile seizures at times of fever. Diazepam is the agent most commonly employed, and a commercial rectal preparation similar to those available in Europe would be welcome in the US.

BEHAVIOR AND LEARNING DISORDERS

ATTENTION DEFICIT DISORDER (ADDH) AND DELINQUENCY SUBGROUPS

Two subgroups of hyperactive children (25 non-delinquent and 9 delinquent) and 1 group of 34 non-delinquent normal children were evaluated from childhood to adolescence at the National Center for Hyperactive Children, Encino, CA, using auditory evoked response potential (AERP) measures and EEG recordings. Abnormalities of CNS maturation and function relected by longitudinal AERP changes and abnormal EEGs characterized the non-delinquent hyperactive subjects, while delinquent hyperactive subjects showed normal maturational changes. ADDH boys with neurologic abnormalities had a better outcome than those with normal CNS functions who later became delinquent and whose behavior was presumed secondary to environmental social factors. Two distinct subgroups of ADDH, one with and one without delinquency, were lineated. (Satterfield JH et al. Longitudinal study of AERP's in hyperactive and normal children: relationship to antisocial behavior. Electroenceph clin Neurophysiol 1987; 67: 531-536).

MINERALS AND CNS DISORDERS

FAMILIAL MAGNESIUM DEFICIENCY SYNDROME

Two sisters aged 4 and 8 years with convulsions and hypomagnesemia are reported from the Depts of Pediatrics and Nuclear Medicine, Univ of Nijmegen, The Netherlands. Both began to have seizures in infancy, one with fever, and both were mentally retarded. One had cerebral atrophy on CT scan. EEG showed seizure discharges with photostimulation in the older child. Phenobarbital and valproate were necessary for the control of convulsions. A low serum magnesium, accompanied by normal calcium and parathormone levels, was not related to the seizures. Urinary excretion of magnesium was elevated and urinary calcium was normal. Parents were consanguinous and had normal magnesium metabolism. An autosomal recessive mode of inheritance was presumed. (Geven WB et al. Isolated autosomal recessive renal magnesium loss in two sisters. Clinical Genetics 1987; 32: 398-402).

COMMENT. The above case shows an association of low magnesium and seizures with CNS pathology. Magnesium deficiency syndromes occur in association with 1) primary hyperparathyroidism, 2) primary aldosteronism, 3) fatty diarrheas, and 4) malnutrition.