

nucleus, and two were also receiving phenytoin. Chorea developed within 1/2 to 3 hours of valproic acid ingestion and lasted 1/2 to 8 hours. Movements were not relieved by phenytoin withdrawal. Chorea resolved when valproic acid was withdrawn in one patient and replaced by divalproex sodium sprinkles in the other two. (Lancman ME, Asconape JJ, Penry JK. Choreiform movements associated with the use of valproate. Arch Neurol July 1994;51:702-704). (Reprints: Dr Lancman, Department of Neurology, Bowman Gray School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157).

COMMENT. Valproate-induced chorea in these patients appeared to be dose related, occurring at peak serum concentrations. The use of divalproex sodium sprinkles avoided the excessive fluctuations of serum levels seen with valproic acid and movements were controlled. Choreoathetosis is a known side effect of the majority of antiepileptic drugs. This may be the first recorded case of valproate-induced chorea.

SEIZURE DISORDERS

COGNITIVE EFFECTS OF PHT AND CBZ AFTER BRAIN TRAUMA

The effects of prophylactic anticonvulsant use of phenytoin (PHT) and carbamazepine (CBZ) on the cognitive and emotional status of a total of 80 brain trauma patients are compared and reported from the Division of Neurosurgery and Department of Neurology, St Louis University School of Medicine and School of Public Health. The median ages of the two groups were 40 (PHT patients) and 36 (CBZ) years. Both phenytoin and carbamazepine had some negative effects on performance measured by neuropsychological tests. Effects generally were small in magnitude and were evident on tasks with motor and speed components. Earlier hypotheses that phenytoin had a more marked effect on higher-level cognitive skills than did carbamazepine were not confirmed. CBZ had a slightly greater negative effect than PHT on verbal fluency, verbal and visual memory, and complex attentional tasks. Patients receiving PHT were possibly more anxious compared to CBZ-treated patients. (Smith KR Jr et al. Neurobehavioral effects of phenytoin and carbamazepine in patients recovering from brain trauma: A comparative study. Arch Neurol July 1994;51:653-660). (Reprints: Dr Smith, Division of Neurosurgery, St Louis University, Box 15250, 3635 Vista at Grand, St Louis, MO 63110).

COMMENT. The neurobehavioral effects of phenytoin and carbamazepine were small and of limited functional significance. Most of the patients had no clinically detectable deficits while receiving either drug. Substantial variability was noted in drug serum concentrations at test sessions in individual patients, and between drug levels and test scores from subject to subject. Individual differences among patients and possible idiosyncratic responses to drugs are factors to be considered in the use or choice and evaluation of AEDs in brain trauma patients.

A previous randomized, double-blind study has shown that phenytoin prevents posttraumatic seizures only during the first week after severe head injury. (Temkin NR et al. N Engl J Med 1990;323:497). Some authorities have concluded that prophylactic drugs should be withheld, or administered only in a single loading dose, after severe head injury, minimizing the risk of idiosyncratic side-effects, especially exfoliative dermatitis. (Progress in Pediatric Neurology. Millichap JG, Ed, Chicago, PNB Publishers, 1991, pp 54-56).