

Every anticonvulsant drug, both old and new, has its problems, and clinical trials are fraught with potential hazards (e.g. liver fatalities with valproate, leukopenia with carbamazepine, erythema multiforme and lymphoma with phenytoin, and learning disorders with barbiturates). Hopefully, the Vigabatrin-induced CNS vacuoles in animals will prove to be a species specific effect but close monitoring in man is required.

#### CAUSES OF ANTIPILEPTIC TREATMENT FAILURE

The Veterans Administration Epilepsy Cooperative Study Group (Regional Epilepsy Center, VA Med Ctr, 4500 S Lancaster Rd, Dallas, TX) have evaluated monotherapy with carbamazepine, phenobarbital, phenytoin, and primidone in a total of 622 patients with previously untreated partial seizures, with particular attention to seizure frequency, neurotoxicity, and systemic toxicity. These 3 factors contributed equally to failure in the first 6 months but systemic toxicity, primarily skin rash, played a relatively minor role in drug failure after that time interval, with the same pattern seen for all drugs studied. After 6 months, failure is determined by seizure frequency and neurotoxicity and is relatively low. A failure rate of 25.3 patients/month during the first 6 months was approx. 6.5 times that during the following 18 months (3.9 patients/month). The first 24 months were critical for successful control since after that time the failure rate falls rapidly to 0.83 patients/month during a 12 month period follow-up. (Homan RW, Miller MS. Causes of treatment failure with antiepileptic drugs vary over time. Neurology 1987;37:1620-1623).

COMMENT: Such studies would be difficult to duplicate in children although similar results might be expected. That dermatologic, hypersensitivity reactions should occur primarily during the first few months of a new antiepileptic drug (AED) treatment is not surprising. It is likely that the majority would have developed within the first 2 weeks. The incidence of skin rash in the first 6 months of this study involving only adults was 6% and similar to that encountered in children taking phenytoin but higher than that usually reported for carbamazepine (3 to 5%) phenobarbital (1 to 2%) and primidone (rare). AED hypersensitivity reactions are generally more prominent in young children than in adults (e.g. phenytoin, valproate).

#### DRIVING AND EPILEPSY

Of 400 drivers with epilepsy questioned, 133 admitted having one or more seizures at the wheel, and 17% had resulting accidents. The authors from the Institut de Reserches Neurologiques, Marseille, France, and Dept Neurology, SUNY Health Sciences Center at Brooklyn, NY, attempting to relate the risk of accidents to the type of seizure, were able to characterize 109 attacks in 82 subjects of which 55% led to an accident. Young drivers accounted for one half those with seizures at the wheel and a complex partial seizure usually without aura was the most common pattern, being responsible for 88% of the accidents. Those with auras were significantly less likely to lead to accidents. Many of the patients were driving illegally, 46% having seizures at least monthly and 74%, at