

University of Miami, FL. Mean age was 34 years (range, 2-87 years). Valproate aqueous solution (500mg/5 ml), one-fourth daily dose (median dose 375 mg or 5.1 mg/kg), diluted with 50 ml normal saline or 5% dextrose/water, infused over 1 hour, repeated 6 hourly for up to 2 days. Transient severe side effects in 54 (17%) included headache, reaction at injection site, nausea, vomiting, somnolence (2% each), dizziness, and abnormal taste (1% each). Six left the study prematurely due to valproate intolerance: pain at IV site, amylase elevations, headache, nausea and vomiting. Abnormal serum chemistries following treatment in 7 generally returned to normal. (Devinsky O et al. Safety of intravenous valproate. Ann Neurol Oct 1995;38:670-674). (Respond: Dr Devinsky, Department of Neurology, Hospital for Joint Diseases, 301 East 17th Street, New York, NY 10003).

COMMENT. This study demonstrates the relative safety of IV valproate, which is not yet available for general use in the US. Previous studies in Europe, where the IV preparation is available, have demonstrated efficacy in neonatal seizures, and in neurosurgical adult patients with status epilepticus resistant to diazepam. The authors recommend further trials to determine optimal dose, efficacy, and safety.

LORAZEPAM V DIAZEPAM IN STATUS EPILEPTICUS

A prospective, open, odd and even dates trial of lorazepam compared to diazepam for the treatment of acute convulsions and status epilepticus in 102 children is reported from the Royal Liverpool Children's NHS Trust, UK. Lorazepam (0.05 - 0.1 mg/kg) and diazepam (0.3 - 0.4 mg/kg) controlled convulsions within 20 to 60 seconds in 76% and 51% of patients, respectively, after a single dose administered IV over 15 to 30 seconds. Multiple doses as well as additional AEDs were required in 17 patients who received an initial injection of diazepam compared to only 1 who received lorazepam. Respiratory depression occurred in 7 diazepam treated patients and necessitated admission to intensive care. No patient receiving lorazepam required intensive care. Rectal administration, when venous injection was not possible, was 100% effective with a single dose of lorazepam in 6 patients treated, whereas 13 of 19 patients receiving diazepam rectally required multiple doses, 12 required additional AEDs, 1 had respiratory depression, 2 were admitted to intensive care, and 7 relapsed with recurrence of seizures within 24 hours. (Appleton R et al. Lorazepam versus diazepam in the acute treatment of epileptic seizures and status epilepticus. Dev Med Child Neurol 1995;37:682-688). (Respond: Dr Richard Appleton, Royal Liverpool Children's NHS Trust, Alder Hey, Eaton Road, Liverpool L12 2AP, UK).

COMMENT. Lorazepam appears to be safe, at least as effective as diazepam in the initial control of acute convulsions, including status epilepticus, and more effective in sustaining seizure control. Rectal lorazepam was useful in infants when intravenous injection was impractical. Lorazepam has a longer half life than diazepam, and its duration of action is more prolonged, accounting for the more sustained control. (See Progress in Pediatric Neurology I, 1991, PNB Publishers, pp124-5).

RISK OF STEVENS-JOHNSON SYNDROME WITH AEDs

An international case-controlled study of medication use and the risk of Stevens-Johnson syndrome or toxic epidermal necrolysis is reported by the Groupe Epidemiologie LY Stevens Johnson (ELYS), Department of Dermatology,