TOXIC AND INFECTIVE DISORDERS

VALPROATE-INDUCED FATAL HEPATOTOXICITY

An 18 month old infant with fatal VPA-related hepatic toxicity is reported from Children's Mercy Hospital, Kansas City, MO, and the Mayo Clinic, Rochester, MN. The infant had received L-carnitine supplements and did not have Alpers disease. The child presented at 15 months with developmental delay, periodic vomiting, ataxia, chorea, hypotonia, areflexia, and nocturnal myoclonus. VPA, 15 mg/kg per day, supplemented with L-carnitine, 200 mg 4xdaily, resulted in initial partial control of the chorea and myoclonus. Relapse after 9 weeks therapy was accompanied by lethargy, vomiting, and hepatic dysfunction, resulting in death in 6 weeks. The liver was small, atrophic, and yellow at autopsy, and the brain showed neuronal loss and gliosis in the brain stem, cerebellar nuclei, and spinal cord. (Murphy JV, Groover RV, Hodge C. Hepatotoxic effects in a child receiving valproate and carnitine. J Pediatr Aug 1993;123:318-320). (Reprints: Jerome V Murphy MD, Children's Mercy Hospital, 2401 Gillham Rd, Kansas City, MO 64108).

COMMENT. The authors contend that the clinical features and pathological findings ruled out Alpers disease, but an undiscovered explanation for the neurological disorder and some contributory metabolic cause could not be definitely excluded. Nonetheless, this experience demonstrates the potential hazard of valproic acid therapy, particularly in young and neurologically impaired children, and carnitine supplements are not a prophylactic panacea against VPA liver toxicity.

Fanconi syndrome associated with valproate therapy for seizures in two developmentally delayed children, aged 4 and 9 years, is reported from Harvard Medical School, and Northampton Area Pediatrics, MA (Lande MB et al. Reversible Fanconi syndrome associated with valproate therapy. J Pediatr Aug 1993;123:320-322).

SENSORINEURAL DEAFNESS AND MMR IMMUNIZATION

Nine reports of sensorineural hearing loss after measles, mumps, and rubella (MMR) immunization were evaluated at the Radcliffe Infirmary, Oxford, England. In 6 cases, the MMR was possibly related and in 3, the immunization was not the cause. In those affected by the MMR, the deafness was bilateral in 2 and unilateral in 4. (Stewart BJA, Prabhu PU. Reports of sensorineural deafness after measles, mumps, and rubella immunization. Arch Dis Child July 1993;69:153-154). (Respond: Dr Stewart, Community Health Offices, Radcliffe Infirmary, Oxford OX2 6HE, England).

COMMENT. Deafness is reported with all components of MMR.