

prospective, randomized, study of aggressive versus conservative management is required.

INFECTIOUS DISORDERS

RELAPSING HERPES SIMPLEX ENCEPHALITIS WITH CHOREA

Herpes simplex encephalitis (HSE) followed a biphasic course with relapse in 3 children aged 11 years, 9 months, and 11 months reported from the Hospital for Sick Children, London and South Hampton General Hospital, England. All 3 presented with fever and seizures and relapse was accompanied by generalized or hemi-chorea in 2 patients. All patients received repeat courses of acyclovir, antibiotics and anticonvulsants. Dexamethasone was added in the older patient and the acyclovir course was followed by vidarabine in 2 patients. All patients had residual sequelae at discharge: 1 had a mild right facial weakness and persisting dysphasia, another was severely handicapped with persisting chorea and a third was visually inattentive and had a right hemiplegia and left hemichorea. The cause of the relapse was not definitely determined. A possible resistant organism might indicate a longer initial course of high dose acyclovir or alternatively, a post-infectious neuroallergic process might suggest the substitution of immunomodulatory treatment in place of further antiviral treatment (Pike MG et al, Herpes simplex encephalitis with relapse. Arch Dis Child Oct 1991; 66:1242-4).

COMMENT. Relapsing herpes simplex encephalitis is not uncommon in adults but is rare in children. Chorea in association with HSE relapse is of interest. The authors refer to 7 additional patients reported in the literature.

Autism is another unusual sequel to herpes simplex encephalitis described in a 31 year old adult at the University of Goteborg, Sweden. (Gillberg IC. Autistic syndrome with onset at age 31 years: Herpes encephalitis as a possible model for childhood autism. Dev Med Child Neurol Oct 1991; 33:920-924). Other cases in the literature have occurred in pre-adolescence. Autism is not necessarily a developmental disorder and temporal lobe damage caused by herpes encephalitis may explain some cases. The Kluver-Bucy syndrome, characterized by emotional instability, hypersexuality and hyperorality, has also been described as a complication of herpes encephalitis when both temporal lobes have been involved.

PROGNOSIS OF ENCEPHALITIS

A population based, controlled follow-up study of the general outcome of 73 children followed for 2 to 12 years after the acute phase of childhood encephalitis is reported from the University of Oulu, Finland. Varicella accounted for 23% of cases, mumps 11%, herpes simplex 8%, measles 5%, and the etiology was unknown for 44%. The mean age at onset was 5.9 years

(range 5 days to 14 years). The 61 school-age children had lower performance and full-scale IQs than their randomly selected, age- and sex-matched controls. Visual acuity was more often reduced and EEG and ENG abnormalities were more frequent. A poor prognosis was infrequent, the incidence being 3.5 per million children at risk annually. Dysarthria was the most frequent sequel of HSV encephalitis. Ataxia, seen most commonly with varicella encephalitis in the acute phase, persisted in only 1 of 17 children at follow-up examination. The prognosis for childhood encephalitis in this study is much better than anticipated on the basis of earlier follow-up studies that included a greater number of HSV cases (Rantala H et al. Outcome after childhood encephalitis. Dev Med Child Neurol Oct 1991; **33**:858-867).

COMMENT. A case of severe macrocephaly and brain damage is reported in association with second trimester congenital varicella infection from the Departments of Neurology and Clinical Genetics, The Hospital for Sick Children, Great Ormond Street, London, England (Scheffer IE, Baraitser M, Brett EM. Dev Med Child Neurol Oct 1991; **33**:916-920).

SEIZURE DISORDERS

VALPROIC ACID AND CARNITINE METABOLISM

Plasma total, free, and acyl carnitine levels were determined in children treated with valproic acid at the Valley Children's Hospital and University of California, San Francisco, Fresno, CA. The mean total carnitine level was significantly lower in patients given valproic acid polytherapy compared with normal subjects and with those receiving valproic acid monotherapy. The levels in both the valproic acid monotherapy and polytherapy groups were significantly lower than those treated with other antiepileptic drugs. The mean free carnitine level was significantly lower in both the valproic acid monotherapy and polytherapy groups compared to normal subjects and the other antiepileptic drug group. Acylcarnitine levels were also lower in the polytherapy valproic acid group compared to the monotherapy valproic acid group and those receiving other antiepileptic drugs. The study indicates that a general decrease in the carnitine pool should be anticipated in patients taking valproic acid polytherapy and to a lesser degree, monotherapy. (Opala G, et al. The effect of valproic acid on plasma carnitine levels. AJDC Sept 1991; **145**:999-1001).

COMMENT. Plasma and erythrocyte carnitine was significantly lower in 37 children on sodium valproate alone or in combination with other drugs compared to levels in 22 children on drugs other than sodium valproate in a study from the Royal Aberdeen Children's Hospital, University of Aberdeen, Scotland (Thom H et al. Ammonia and carnitine concentrations in children treated with sodium valproate compared with other anticonvulsant drugs. Dev Med Child Neurol Sept 1991; **33**:795-802). Plasma ammonia was also elevated in the valproate