beginning before immunization in the first 30 days of life; 5) 8 cases with a history of first seizures recorded at a subsequent visit; and 6) 2 cases of infantile spasms and 5 acute encephalopathies with onset recorded 30 days or more after DTP immunization.

Of 231 post-immunization first seizures selected for study without other predisposing cause in children 30 days of age or older, 55 had afebrile seizures, and 176 had febrile seizures. The incidence of recorded febrile seizures in the immediate post-immunization period was 3.7 times that in the period 30 days or more after immunization. One child suffered a prolonged status epilepticus on the evening of her third DTP shot, and neurologic sequelae included focal epilepsy at 6-yr follow-up. Six cases of first seizures occurred within 30 days of immunization, and the expected incidence without immunization in this time interval was calculated at 5.07. The authors conclude that serious neurologic sequelae of DTP immunization are extremely infrequent in otherwise healthy children. (Walker AM et al. Neurologic events following diphtheria-tetanus-pertussis immunization. Pediatrics March 1988;81:345-9).

COMMENT. The omission of several groups of children from this retrospective epidemiological study detracts from the significance of the conclusions and estimates of incidence of DTP-related febrile and non-febrile seizures. The role of DTP as a precipitating cause in children with a predisposition to seizures and as a possible cause of infantile spasms is neglected. It is unfortunate that the study did not address the known risks of DTP in children with prior neurologic disease or predisposition to seizures including positive family history (see Ped Neur Briefs Nov 1987;1:40).

INFANTILE SPASMS

Four infants with partial seizures evolving to infantile spasms were investigated using simultaneous EEG-video-telemetry recording in the Dept of Pediatrics, Nagoya University, Nagoya, and Division of Pediatric Neurology, Central Hospital, Aichi Prefectural Colony, Kasugai, Japan. Partial seizures were characterized by cessation of activity, staring, flushing, automatisms, increased tone and laughter. (Yamamoto N, Watanabe K et al. Partial seizures evolving to infantile spasms. Epilepsia Jan/Feb 1988;29:34-40).

COMMENT. A cry or scream is the most common ictal element in infantile spasms, and laughter and a frightened or confused expression, manifestations of partial seizures, are frequently described (Jeavons PM, Bower BD. Clinics in Developmental Medicine No 15, 1964, London, Spastics Society and Heinemann). The above report appears to be the first in which infantile spasms were preceded by partial seizures confirmed by EEG-VT. However, one of the above authors, in a previous study of the evolution of EEG abnormalities accompanying infantile spasms, reported hypsarrhythmia preceded by focal sharp wave patterns, compatible with partial seizures (Watanabe K et al. Dev Med Child Neurol 1973;15:584).

REFLEX EPILEPSY

HOT WATER EPILEPSY (HWE)

Seizures precipitated by very hot water-head baths (40-50° C), a regional religious custom, or showers were seen in 279 patients between 1980-83 in Bangalore, Southern India, and are reported from the Depts of Neurology and

Biostatistics, National Institute of Mental Health and Neurosciences, Bangalore, India, and the Neuroepidemiology Branch, National Institute of Neurological Disorders, NIH, Bethesda, MD, USA. The ages ranged from 8 mos to 58 yrs with a childhood preponderance and 28% below 6 years. The male:female ratio was 2.65:1. Only 7% had a history of febrile convulsions. Complex partial seizures were the most frequent manifestation of HWE (67%) and generalized tonic-clonic seizures occurred in 33%. Spontaneous non-reflex epilepsy followed or preceded the onset of HWE in 30%. A positive family history of epilepsy was obtained in 22% and for HWE in only 7%. The avoidance of the hot water stimulus should be supplemented with anticonvulsant medication in therapy. (Satishchandra P et al. Hot-water epilepsy: a variant of reflex epilepsy in Southern India. Epilepsia Jan/Feb 1988;29:52-6).

COMMENT. The mechanism of HWE is unclear. A hot-air stimulus to the heads of patients failed to induce attacks. A kindling effect has been induced in rats by repeated exposure of the head to hot water (Klanenberg BJ, Sparber SB. Epilepsia 1984:25:292). Hot water applied to the abdomen induces fever and changes in cortical electrical activity of cats and kittens (Kashiwase Y. Brain Nerve (Tokyo) 1962;14:698). The body temperature of patients in the present study is not documented and fever induced by the hot water stimulus may explain some cases, especially in younger children.

Absence epilepsy evoked by thinking or talking about driving an automobile is an unusual example of reflex epilepsy also reported in the current issue of Epilepsia (Bencze KS et al. of the Dept of Neurology, University of South Florida, Tampa, FL).

DEGENERATIVE AND METABOLIC DISORDERS

MONOAMINE METABOLITES IN RETT SYNDROME

Cerebral metabolites of noradrenaline, dopamine and serotonin, y-aminobutyric acid, and 23 amino acids were present in normal concentrations in the CSF of 5 girls with Rett syndrome studied in the Depts of Pharmacology and Therapeutics, and Dept of Paediatrics, University of British Columbia, Vancouver, Canada. The authors doubt that any biochemical abnormalities have been clearly established as characteristic of the syndrome. (Perry TL, Dunn HG et al. Cerebrospinal fluid values for monoamine metabolites, y-aminobutyric acid and other amino compounds in Rett syndrome. J Pediatr Feb 1988;112:234-8).

COMMENT. A previous report of low CSF levels of monoamine metabolites in patients with Rett syndrome (Zoghbi HY et al. N Engl J Med 1985;313:921) is not supported by the present study. Hyperammonemia reported originally by Rett is another suggested biochemical basis for the syndrome unconfirmed in subsequent reports. The lack of uniformity of these findings suggests that Rett syndrome is a nonspecific entity with more than one etiology.

INFANTILE REFSUM DISEASE

Two patients with infantile Refsum (phytanic acid storage) disease were treated at 9 mos and 5½ years of age with a low phytanic acid diet and the effects studied over a 2-yr period or longer in the Depts of Chemical Pathology, Neurology and Histopathology, Adelaide Children's Hospital, and the Dept of Neurology, Prince of Wales Children's Hospital, New South Wales,