Conner's scale places little emphasis on irritability and sleeplessness, symptoms that were prominent in the reactors in the University of Melbourne study. The number of reactors to tartrazine identified in this study contrasts markedly with those of previous studies, and may have been related to the method used for selection of subjects. In Australia, the Feingold hypothesis is still alive.

ATTENTION PROBLEMS IN EPILEPSY

The relation of laterality of the epileptogenic focus to cognition and attention in 43 unmedicated children, mean age 10 years, with benign rolandic epilepsy of childhood was assessed at Clinica Neurologica Universita, Perugia, Italy. Children with right sided or bilateral paroxysmal foci scored worse on a figure cancellation task, whereas those with left-sided foci performed as well as controls. The task measures attentive processes and visuospatial orientation. (Piccirilli M et al. Attention problems in epilepsy: possible significance of the epileptogenic focus. Epilepsia Sept/Oct 1994;35:1091-1096). (Reprints: Dr M Piccirilli, Clinica Neurologica Universita, Via E Dal Pozzo, 06100 Perugia, Italy).

COMMENT. Attentional difficulties in children with benign rolandic epilepsy are related to right hemisphere dysfunction and impaired visuospatial processing. The data did not support an hypothesis of left spatial neglect. The laterality of the epileptic focus is linked to the type of cognitive deficit. Left hemisphere dysfunction affects language-related abilities. Attentional disorders in epileptic children can be explained by paroxysmal activity, and is independent of any effect of antiepileptic drugs.

SEIZURE DISORDERS

PSYCHOSES AND EPILEPSY: PARADOXICAL NORMALIZATION

Five children aged 2.5 to 9 years who developed paradoxical, or forced normalization (acute psychiatric symptoms with abrupt cessation of seizures and normalized EEG) are reported from the Shaare Zedek Medical Center, Jerusalem. Three had Lennox-Gastaut syndrome, and 2 had simple motor and complex partial seizures. They had been treated with ACTH, valproic acid, carbamazepine, or vigabatrin. One patient at age 9 years was having multiple daily seizures despite phenobarbital, phenytoin, and carbamazepine. Within 7 days of initiating a second trial of ACTH gel (80 U/day) for Lennox-Gastaut syndrome, seizures ceased and EEG epileptic activity disappeared. Concomitantly, his behavior changed; he became disoriented, aggressive, hyperactive, dyspraxic, and dysphasic. ACTH was discontinued, he remained seizure-free, but his behavior necessitated psychiatric hospitalization. He gradually improved over 5 years, but as an adult he is retarded (IQ 55). He has no seizures, no antiepileptic therapy, and his EEG is normal. The behavioral manifestations in this patient were classified as organic mental syndrome; in the remaining patients they were a schizophrenia-like psychosis in 1, and autistic withdrawal in 3. (Amir N, Gross-Tsur V. Paradoxical normalization in childhood epilepsy. Epilepsia Sept/Oct 1994;35:1060-1064). (Reprints: Dr N Amir, Neuropediatric Unit, Shaare Zedek Medical Center, Jerusalem, Israel 91031).

COMMENT. Psychiatric complications have been reported in adolescents and adults with absence epilepsy. Paroxysmal normalization (PN) was

triggered by ethosuximide and methsuximide. The authors found no previous case of PN reported in childhood epilepsy. In 2 of their patients with a typical history of PN, the discontinuance of treatments (ACTH and vigabatrin) resulted in seizure recurrence and a concomitant psychiatric remission. In patient 1, described above, withdrawal of ACTH caused neither seizure recurrence nor change in behavior. Usually, discontinuation of the offending antiepileptic drug is sufficient to reverse the psychiatric symptoms.

This syndrome was particularly common during trials of phenacemide (Phenurone) in the early 1950s, and some drugs appear to have a greater propensity than others to cause personality changes. ACTH is more likely to cause psychiatric side-effects in older children and adults than in infants and young children. As the authors suggest, the association between epilepsy and psychosis is age-dependent.

PRENATAL EVENTS AND CNS MIGRATION DISORDERS

The role of pre-, peri-, and postnatal environmental factors and genetic predisposition in the genesis of neuronal migration disorders (NMD) in 40 patients with epilepsy was determined by standardized questionnaires at the Montreal Neurological Institute and Hospital, Canada. Potentially harmful prenatal events (maternal trauma, medications, roentgenograms, infections) were reported in pregnancy histories of 58% of patients with NMD compared to 15% of 40 epileptic controls without NMD. In contrast, peri- and postnatal factors were present in only 22% of NMD patients compared to 50% of controls. Genetic factors (family history of epilepsy, mental retardation, or CNS malformation) occurred in 13 and 20% of families, respectively. Stillbirths occurred in 3% of NMD sibling pregnancies, but none in controls. Prenatal environmental factors are important in the cause of NMD. (Palmini A, Andermann E, Andermann F. Prenatal events and genetic factors in epileptic patients and neuronal migration disorders. Epilepsia Sept/Oct 1994;35:965-973). (Reprints: Dr E Andermann, Montreal Neurological Institute, 3801 University St, Montreal, Quebec H3A 2B4, Canada).

COMMENT. Maternal physical trauma in the first trimester was the most significant factor associated with NMD. Genetic factors are important in lissencephaly. Dr Harvey B Sarnat comments on advances in neuroblast migratory disorders in Progress in Pediatric Neurology II, PNB Publishers, 1994, pp279-280. Morphological and metabolic abnormalities of the ependyma, and congenital cytomegalovirus were documented as causes, as well as new experimental data on neuroblast migration mediated by radial glial cells.

FOCAL SPECT LESIONS AND INFANTILE SPASMS

Seven of 10 patients with infantile spasms examined by SPECT at Tokushima University School of Medicine, Japan, showed localized cerebral hypoperfusion in the temporal lobes. EEGs near time of SPECT showed corresponding focal abnormalities in 5. The MRI was less revealing, with confirmation of localized lesions in only 3. (Miyazaki M et al. Infantile spasms: localized cerebral lesions on SPECT. Epilepsia Sept/Oct 1994;35:988-992). (Reprints: Dr M Miyazaki, Department of Pediatrics, Tokushima University School of Medicine, Kuramoto-cho, Tokushima 770, Japan).