

varied from 3 to 8 weeks. Speech was regained suddenly and unexpectedly, and the severe dysarthria that followed lasted for 1 to 5 weeks. Recovery was associated with normalization of tongue movements. Factors predictive of mutism were 1) tumor filling and adherence to the floor of the fourth ventricle; 2) shunting for hydrocephalus prior to surgery; and 3) postsurgical edema of the pontine tegmentum. (van Dongen HR et al. The syndrome of 'cerebellar' mutism and subsequent dysarthria. Neurology Nov 1994;44:2040-2046). (Reprints: Dr HR van Dongen, Department of Neurology, University Hospital Rotterdam-Dijkzigt, dr Molewaterplein 40,3015 GD Rotterdam, The Netherlands).

COMMENT. The authors cite 36 cases of cerebellar mutism from the literature. An additional 2 cases are reported in Progress in Pediatric Neurology Vol. II, Chicago, PNB Publishers, 1994, pp219-220. The complication was correlated with the amount of the posterior vermis resected. One tumor was a medulloblastoma and the other an astrocytoma. Speech was regained after 2 months.

A case of mutism followed by dysarthria and agrammatic speech is reported in an adult after a right cerebellar infarction. (Silveri MC et al. The cerebellum contributes to linguistic production: a case of agrammatic speech following a right cerebellar lesion. Neurology Nov 1994;44:2047-2050).

## BEHAVIOR AND ATTENTION DISORDERS

### FOOD COLORING AND BEHAVIOR

The association between the ingestion of tartrazine synthetic food coloring and behavioral change in children referred for assessment of hyperactivity was investigated at the Royal Children's Hospital, University of Melbourne, Australia. Two hundred hyperactive children whose parents had noted changes in behavior with diet were included in a 6-week open trial of a diet free of synthetic colorings. The parents of 150 reported behavioral improvement with the diet, and deterioration when foods containing synthetic colorings were introduced. A 30-item inventory with 5 behavior clusters (irritability, sleeplessness, restlessness, aggression, and inattention) discriminated between dye ingestion and placebo. A double-blind, placebo-controlled, 21-day study of 34 reactive children, using each child as his or her own control, identified 24 atopic children as clear reactors to tartrazine at all six dose levels, between 1 and 50 mg. They were irritable and restless and had sleep disturbance. A dose response was obtained and the effect was prolonged with doses >10 mg. (Rowe KS, Rowe KJ. Synthetic food coloring and behavior: a dose response effect in a double-blind, placebo-controlled, repeated-measures study. J Pediatr Nov 1994;125:691-698). (Reprints: Katherine S Rowe MBBS, Department of Pediatrics, University of Melbourne, Royal Children's Hospital, Parkville, Victoria 3052, Australia).

COMMENT. The authors appear to have demonstrated a relation between tartrazine ingestion and behavior in 24 atopic children, aged 2 to 14 years. Parents were found to be reliable observers and raters of their children's behavior. The strict criteria of ADHD, and a score of >15 on the Conners Abbreviated Parent-Teacher Questionnaire, required for inclusion in many previous studies of diet and hyperactivity may have missed some reactors, accounting for inconclusive results. Further, the

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 Università, 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 Università, 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