

1991; 88:115-120). Only 11 (31%) of 36 children had normal development upon reassessment in early childhood. With or without major complications, extremely low birth weight places children at risk for emerging development problems with age. Head circumference was not addressed in this study.

### **PRENATAL ETIOLOGY OF CEREBRAL PALSY**

The incidence of minor malformations in a group of 137 adults with cerebral palsy, living in a New York State residential institution, is reported from the Division of Developmental Pediatrics, Robert Warner Rehabilitation Center, State University of New York, Buffalo, NY. Subjects were classified in three etiological groups: (1) prenatal onset, (2) postnatal onset, and (3) perinatal onset. Criteria for enrollment in group 1 included a known prenatal cause (i.e., CNS malformation, chromosomal aberration or congenital infection) or fullterm birth with unremarkable delivery and neonatal course. Of 109 patients with CP of prenatal origin, 82% had unknown causes, 10% CNS malformation, 5% chromosomal aberration and 3% congenital infection. Of 28 patients with postnatal causes, 39% had bacterial meningitis, 32% encephalitis, 11% metabolic disease, 7% cardiopulmonary arrest and 7% trauma. Spastic quadriplegia, profound mental retardation, and seizures occurred in 80-90% of the total sample, and the neurological findings were similar in the two groups. The prenatal group with known etiology and a subgroup with unknown etiology had significantly more minor malformations than the postnatal group. Individuals with CP and multiple minor malformations, in the absence of definitive postnatal or perinatal factors, have CNS developmental dysfunction caused most likely by prenatal influences. (Coorssen EA et al. Multiple minor malformations as a marker for prenatal etiology of cerebral palsy. Dev Med Child Neurol August 1991; 33:730-736).

**COMMENT.** Increased numbers of minor malformations are indicative of aberrant embryonic development of the CNS (Illingworth R. "Why blame the obstetrician? A review." BMJ 1979; 1:797-801) Less than 10% of CP is caused by perinatal asphyxia or events related to delivery (Blair E, Stanley F. "Intrapartum asphyxia: a rare cause of cerebral palsy." J Pediatr 1988; 112:515-519).

### **INFANTILE SEIZURES**

#### **INFANTILE SPASMS AND PARTIAL SEIZURES**

The concurrence of infantile spasms and partial seizures was studied in 11 infants using time-locked video electroencephalography at the Department of Pediatrics, Children's Hospital, Ohio State University School of Medicine, Columbus, OH. Partial seizures preceded the onset of infantile spasms in 7. In some, the focal EEG ictal activity was overriding the generalized slow-wave transient and in others was visible only during the generalized decrement. Interictal EEGs showed hypsarrhythmia in 6 patients and modified hypsarrhythmia in 5. Brain malformations occurred in 3 and tuberous