

EFFECTS OF HIV ON COGNITIVE AND MOTOR DEVELOPMENT

The cognitive and motor development of 126 infants born to nondrug-using, HIV-seropositive Haitian women, assessed at 3-month intervals from birth to 24 months, is reported from the University of Miami School of Medicine, FL. By 18 months of age, 28 were HIV-infected, and these infants were compared to 98 uninfected infants used as controls. The mean mental and motor scores on the Bayley Scales of Infant Development were significantly lower for infected compared to uninfected controls. Initial differences between the two groups, noted at 3 months, increased over time. Cognitive development was within normal levels in one third of infected infants, despite low mean scores for the group, and motor development was normal in one half. (Gay CL, Armstrong FD et al. The effects of HIV on cognitive and motor development in children born to HIV-seropositive women with no reported drug use: Birth to 24 months. Pediatrics Dec 1995;96:1078-1082). (Respond: Dr F Daniel Armstrong, Department of Pediatrics-R131, Box 016960, Miami, FL 33101).

COMMENT. Infants perinatally infected with HIV are at risk of cognitive and motor delays in the first two years of life. Visual-motor integration, processing speed, verbal memory, and other neuropsychological measures, not tested in infants and toddlers, may be uncovered at later follow-up.

Cytomegalovirus encephalitis with AIDS has been studied in 7 adults treated at the Department of Neurology, Northwestern University Medical School, Chicago (Cohen BA. Neurology Feb 1996;46:444-450). Retrospective series showed a poor prognosis with rapid mortality, whereas 4 of the 7 patients diagnosed and treated responded to therapy. Polymerase chain reaction amplification of cytomegalovirus DNA allowed detection in CSF, specific for CNS infection.

DEVELOPMENTAL ANOMALIES

LISSENCEPHALY TYPE III SYNDROME

Arthrogryposis multiplex congenita (AMC), called fetal akinesia sequence (FAS) in this study of 5 lethal cases, was associated with a distinctive neuropathological pattern, named type III lissencephaly syndrome, as reported from the Hopital Henri Mondor, Creteil, and the Hopitals Port Royal and Saint Antoine, Paris, France. In this group of primary neurogenic FAS a diffuse neurodegenerative process affected the cerebrum and spinal cord, causing brain atrophy, hydrocephalus, microcephaly, and gyral reduction. Parental consanguinity was present in one case, and 2 cases occurred in sibs, suggesting a genetic, autosomal recessive, cause. Polyhydramnios, intrauterine growth retardation, severe arthrogryposis, and pulmonary hypoplasia was present in all 5 cases. The developmental abnormalities are thought to be secondary to fetal akinesia. (Razavi FE et al. Lethal familial fetal akinesia sequence (FAS) with distinct neuropathological pattern: Type III Lissencephaly syndrome. Am J Med Genet 1996;62:16-22). (Reprints: Ferechte Encha Razavi MD, Service Histo-Neuropathologie, Hopital Henri Mondor, 51 Bld de Ml de Lattre de Tassigny, Creteil, Cedex 94010, France).

COMMENT. In a prospective study of 89 infants with arthrogryposis multiplex congenita, Banker (1986) found 84 neurogenic in type. The present authors emphasize the heterogeneous nature of the syndrome, with special attention to neurodegenerative familial cases.