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J. GORDON MILLICHAP, M.D., F.R.C.P., EDITOR

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INFECTIOUS DISORDERS

PERINATAL HIV AND NEURODEVELOPMENT

The natural history of HIV disease and neurodevelopmental disorders in 21 perinatally infected children were examined in a collaborative prospective study sponsored by the National Institute of Child Health & Human Development, Rockville, MD. Bayley Scales were compared during the first 24 months of life in the infected group, in 65 seroreverted children born to HIV-infected mothers, and 95 non-HIV-infected children of non-HIV-infected mothers. Mental and motor impairments (<50) in all functional areas were present predominantly in HIV-infected children who developed AIDS in the first 2 years. These children also had small head circumferences and neurologic abnormalities. Children with AIDS manifesting only lymphoid interstitial pneumonia showed inconsistent, mild, developmental impairments delayed in onset. HIV-infected children without AIDS and uninfected children were not developmentally impaired. (Nozyce M et al. Effect of perinatally acquired human immunodeficiency virus infection on neurodevelopment in children during the first two years of life. Pediatrics December 1994;94:883-891). (Reprints: Dr Anne Willoughby, Pediatric AIDS Branch, National Institute of Child Health & Human Development, National Institutes of Health, 6100 Executive Blvd, Rm 4B11, Rockville, MD 20852).

COMMENT. Children born to HIV-infected mothers who develop AIDS are at very high risk for serious neurodevelopmental disorders. Those without symptoms of AIDS may develop normally but require frequent monitoring to determine need for therapy. Uninfected children of HIV-infected mothers are not affected by the viral exposure.

Growth was a prognostic indicator in children with HIV-infection treated with zidovudine in the collaborative AIDS Clinical Trials Group. Survival rate after 4 years follow-up was 44%. Risk of death was greatest in children with CD4⁺ lymphocyte percentages <20%, if weight-for-age z score was <2 at entry, and if weight gain was <25th percentile rate in the first 6 months of therapy. (McKinney RE Jr, Wilfert C et al. J Pediatr Nov 1994;125:728-733).

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