

Effects of prenatal exposure to Zidovudine and Lamivudine on brainstem auditory evoked potentials in infants from HIV-infected women.

Poblano A, Figueroa L, Figueroa-Damian R, Schnaas L.

National Center for Rehabilitation, Mexico City, Mexico. drdeaf@starmedia.com

Long-term in utero adverse effects of infants exposed perinatally to antiretroviral drugs are still unknown. The purpose of this study was to determine whether there were differences in Brainstem Auditory Evoked Potential (BAEP) waves and interval interwaves in a group of Zidovudine (AZT) alone or AZT plus Lamivudine (3TC) prenatally exposed infants as the result of a mother with Human Immunodeficiency Virus (HIV) infection; compared with a group of infants not exposed to antiretroviral drugs. Results could provide an index of neurotoxicity in newborns. Pregnant women were recruited at the first trimester of pregnancy, when they were diagnosed with HIV syndrome. Infants were included in the study if they were exposed prenatally to AZT alone or AZT plus 3TC. BAEP recordings were blinded from each investigator and results compared with a cephalic perimeter-matched control group of non-exposed infants. Comparison of wave latencies showed significant delay of wave I and I-III interwave interval in the AZT-3TC-treated group. The present findings suggest that prenatal exposure to the antiretroviral drugs AZT and/or 3TC is related to increased latencies in wave I and I-III interwave interval. This finding may provide an index of toxicity in lower regions of the brainstem in exposed infants.