

Immunodeficiency virus (HIV) type 1 viral genotype on mother-to- child transmission of HIV-1.

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Abstract:

The objective of this study was to determine whether the maternal infecting human immunodeficiency virus (HIV) type 1 clade affects mother-to-child transmission frequency. Mothers in the mother-to-child HIV-1 transmission study in Nairobi, Kenya, were grouped by HIV-1 status of their first enrolled child: uninfected, perinatally infected, or postnatally infected. Restriction fragment length polymorphism (RFLP) analysis was used to determine HIV-1 viral clades of nested polymerase chain reaction products from HIV-1 protease or p24 genes. When inconclusive, sequencing determined the clade. Clade distributions within the groups were compared. The 3 groups displayed a uniform clade distribution. The predominant clades were A (59%) and D (20%). Clades B, C, F, mixed, and recombinant infections comprised the remainder (21%). No significant association was seen between clades A and D and either frequency or mode of vertical transmission. RFLP analysis revealed 2 clade B infections, 9 mixed, and 5 p24/protease recombinant infections in the study population.