

Hormonal contraception and HIV-1 disease progression among postpartum Kenyan women.

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Abstract

OBJECTIVE:

To assess the immediate and longer-term effects of the use of hormonal contraception on the progression of HIV-1 disease in postpartum women.

DESIGN:

A prospective cohort study.

METHODS:

Information on contraceptive use, breastfeeding and intercurrent illnesses was obtained from HIV-infected postpartum Kenyan women monthly in the first year postpartum and quarterly in the second year. Blood was collected for T-cell subset analyses and HIV-1-RNA levels at months 1, 3, 6, 9, 12, 18, and 24 postpartum. The immediate effect of the initiation of oral contraceptive pills (OCP) and depot medroxyprogesterone acetate (DMPA) was assessed by comparing the change in the HIV-1-RNA plasma viral load and CD4 T-cell counts among women remaining off these contraceptive methods with those initiating them. The longer-term effects of OCP and DMPA on disease progression were assessed using Loess curves and linear mixed effects models to compare changes over the first 24 months postpartum in these same disease progression markers.

RESULTS:

There were no significant immediate or longer-term effects of the use of OCP or DMPA on HIV-1-RNA plasma viral loads and CD4 T-cell counts in this cohort of HIV-infected postpartum Kenyan women.

CONCLUSION:

Comprehensive contraceptive counselling for HIV-1-infected women requires an understanding of the effects of various contraceptive methods on HIV-1 disease progression. In this study, hormonal contraception reassuringly had no immediate or longer-term effects on the rate of disease progression in chronically HIV-1-infected postpartum women. This highly effective

family planning method may provide a useful and safe option for the prevention of mother-to-child transmission of HIV-1.