

## **Is the intrauterine device appropriate contraception for HIV-1-infected women?**

### **Abstract:**

**Objective** To assess whether the risk of complications is higher in HIV-1-infected women compared with non-infected women in the two years following insertion of the intrauterine contraceptive device. **Design** Prospective cohort study. **Population** Six hundred and forty-nine women (156 HIV-1-infected, 493 non-infected) in Nairobi, Kenya who requested an intrauterine contraceptive device and met local eligibility criteria. **Methods** We gathered information on complications related to the use of the intrauterine contraceptive device, including pelvic inflammatory disease, removals due to infection, pain or bleeding, expulsions, and pregnancies at one, four, and 24 months after insertion by study physicians masked to participants' HIV-1 status. Cox regression was used to estimate hazard ratios. **Results** Complications were identified in 94 of 636 women returning for follow up (14.7% of HIV-1-infected, 14.8% of non-infected). The incidence of pelvic inflammatory disease was rare in both infected (2.0%) and non-infected (0.4%) groups. Multivariate analyses suggested no association between HIV-1 infection and increased risk of overall complications (hazard ratio=1.0; 95% CI 0.6-1.6). Infection-related complications (e.g. any pelvic tenderness, removal for infection or pain) were also similar between groups (10.7% of HIV-1-infected, 8.8% of non-infected; P=0.50), although there was a non-significant increase in infection-related complications among HIV-1-infected women with use of the intrauterine contraceptive device longer than five months (hazard ratio=1.8; 95% CI 0.8-4.4). Neither overall nor infection-related complications differed by CD4 (immune) status. **Conclusions** HIV-1-infected women often have a critical need for safe and effective contraception. The intrauterine contraceptive device may be an appropriate contraceptive method for HIV-1-infected women with ongoing access to medical services.