Abstract:

Background: While voluntary medical male circumcision (VMMC) has been shown to be protective against HIV-acquisition, the procedure may place men and their partners at risk of HIV infection in the period following circumcision if sex is resumed before the wound is healed. This prospective cohort study evaluates post-circumcision wound healing to determine whether the 42-day post-circumcision abstinence period, recommended by the World Health Organization and adopted by VMMC programs, is optimal. Methods and Findings: Men were circumcised by forceps-guided method and their post-circumcision wounds examined weekly for seven weeks and at 12 weeks. Time to complete healing was recorded in completed weeks since circumcision, and its associations with baseline covariates were assessed by Kaplan-Meier methods and Cox Proportional Hazard Models. A total of 215 HIV-negative and 108 HIV-positive men aged 18–35 years (median 26, IQR 23–30) were enrolled. 97.1% of scheduled follow-up visits were completed. At week 4, 59.3% of HIV-positive men and 70.4% of age-matched HIV-negative men were healed. At week 6, these percentages rose to 93.4% in HIV-positive men and 92.6% in age-matched HIV-negative men. There was no difference in the hazard of healing between 108 HIV-positive and 108 age-matched HIV-negative men (HR 0.91 95% CI 0.70–1.20). Early post-operative infection was associated with delayed healing in both HIV-positive and HIV-negative men (HR 0.48 95% CI 0.23–1.00). Conclusions: Our results indicate that the WHO recommendation for 42-days post-circumcision sexual abstinence should be maintained for both HIV-positive and HIV-negative men. It is important to stress condom use upon resumption of sex in all men undergoing circumcision.