

Abstract:

Cross-sectional analyses have associated vitamin A deficiency with genital shedding of herpes simplex virus (HSV) among human immunodeficiency virus type 1 (HIV-1)-infected women. A randomized clinical trial of vitamin A supplementation given daily for 6 weeks was conducted among 376 women in Mombasa, Kenya, who were coinfectd with HSV-2 and HIV-1. At follow-up, there was no significant difference in the detection of genital HSV DNA between women receiving vitamin A supplementation and women receiving placebo (40% vs. 44%, respectively; $P = .5$). Among women shedding HSV, there was no significant difference in the mean HSV DNA quantity between the group that received vitamin A supplementation and the group that received placebo (4.51 vs. 4.67 log₁₀ copies/swab; $P = .6$). HSV shedding was associated with significantly higher vaginal and cervical HIV-1 shedding, even after controlling for the plasma HIV-1 load and the CD4 count. Vitamin A supplementation is unlikely to decrease HSV shedding.