Vitamin A And Risk Of HIV-1 Seroconversion Among Kenyan Men With Genital Ulcers.

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Abstract

Background: Vitamin A is involved in normal immune function and the maintenance of mucosal integrity through complex effects on cellular differentiation. Objective: We sought to determine whether serum vitamin A levels were associated with altered susceptibility to primary infection with HIV-1 in men with high-risk sexual behaviour and genital ulcers who presented for treatment at an STD clinic in Nairobi, Kenya. Methods: HIV-1 seronegative men were prospectively followed. Vitamin A levels at study entry were compared among 38 men who HIV-1 seroconverted versus 94 controls who remained HIV seronegative. Results: Vitamin A deficiency (retinol less than 20 microg/dl) was very common and was present in 50% of HIV-1 seroconverters versus 76% of persistent seronegatives. Seroconversion was independently associated with a retinol level greater than 20 microg/dl (HR 2.43, 95% CI 1.25-4.70