

Abstract:

OBJECTIVE: To determine whether drug treatment of *Schistosomiasis mansoni* infection leads to a reduction in plasma HIV-1 RNA concentration in coinfecting individuals. **METHODS:** Stool and plasma samples were obtained prospectively from a cohort of HIV-infected persons (n = 30) in Kisumu, Kenya, before and after treatment of schistosomiasis with praziquantel (mean follow-up, 5.6 months; range 1-15 months). Schistosomal circulating cathodic antigen (CCA) concentrations in plasma were determined by ELISA and fecal egg counts were determined by microscopy. HIV-1 RNA concentrations were measured in pre- and post-treatment plasma samples obtained from the patients whose stool samples remained free of schistosomal eggs for the great majority of the follow-up period. **RESULTS:** Comparison of pretreatment and follow-up samples revealed that mean \pm SD fecal egg burden was reduced by 96.7% (481.5 \pm 803.5 versus 16.1 \pm 24.4 eggs/g feces) and mean plasma CCA concentration decreased by 90.1% (3.22 \pm 3.26 versus 0.32 \pm 0.38 microg/ml). In contrast, mean plasma HIV-1 load increased from 3.60 \pm 0.90 to 3.93 \pm 0.95 log₁₀ RNA copies/ml (P < 0.001). Although no correlation was found between changes in HIV-1 load and changes in schistosomal burden, there was a significant correlation between changes in plasma HIV load and the time interval between pretreatment and follow-up samples (r = 0.41; P = 0.027). **CONCLUSIONS:** Treatment of schistosomiasis was not associated with a reduction in plasma HIV-1 load. This study does not, however, exclude the possibility of an adverse effect of helminthic infections on HIV-1 pathogenesis.