Abstract

Serum beta-2 microglobulin (beta 2-M) has prognostic value similar to lymphocyte profiles for predicting disease progression in those infected with the human immunodeficiency virus (HIV). However, the relationship between beta 2-M and HIV disease progression among inhabitants of countries with endemic tropical diseases has not been evaluated. To determine the relationship between serum beta 2-M levels and HIV infection and disease status in an African population, serum beta 2-M levels were measured in 369 patients attending a sexually transmitted disease (STD) clinic in Nairobi, Kenya. Mean serum beta 2-M was significantly higher in HIV seropositive than in HIV seronegative individuals. Among HIV infected patients, higher mean beta 2-M levels were observed in those with HIV associated symptoms or laboratory markers of advanced HIV disease. Significant inverse correlations between beta 2-M and the percentage of CD4 lymphocytes or CD4/CD8 ratio were found. These findings suggest that beta 2-M measurements may have prognostic value for HIV infected populations in developing countries.