ABSTRACT

Circulating levels of endothelial activation biomarkers are elevated in during infection with human immunodeficiency virus 1 (HIV-1) and may also be increased in Kaposi sarcoma (KS). We compared 23 HIV-1-seropositive women with clinically diagnosed KS with 46 randomly selected controls matched for visit year, CD4 count, and antiretroviral therapy status. Conditional logistic regression was used to identify differences between cases and controls. The odds of clinical KS increased with increasing plasma viral load and with intercellular adhesion molecule 1 (ICAM-1) levels above or equal to the median. There was a borderline association between increasing plasma angiopoietin 2 levels and KS. In multivariable modeling including plasma viral load, angiopoietin 2, and ICAM-1, plasma ICAM-1 levels above or equal to the median remained associated with clinical KS (odds ratio = 14.2, 95% confidence interval = 2.3-87.7). Circulating ICAM-1 levels should be evaluated as a potential biomarker for disease progression and treatment response among HIV-infected KS patients.