

A decrease in albumin in early HIV type 1 infection predicts subsequent disease progression.

Abstract:

We investigated the association between albumin levels and HIV-1 disease progression among 78 Kenyan women followed from before infection through a median of 70 months. With HIV-1 acquisition, median albumin decreased from 38.5 g/liter to 36.8 g/liter ($p = 0.07$) and the prevalence of hypoalbuminemia increased from 16% to 32% ($p = 0.02$). Each 1 g/liter decrease in albumin with HIV-1 acquisition was associated with a 13% increase ($p = 0.01$) in the risk of progressing to a CD4 count <200 cells/mul, after adjustment for set point plasma viral load. A decrease in albumin of over 10% was associated with a 3.5-fold increase in the risk of progressing to a CD4 count <200 cells/mul (95% CI 1.4-9.0, $p = 0.008$). Trends for an increased risk of mortality were also seen. A greater decrease in albumin levels accompanying HIV-1 acquisition may be a marker for changes in early infection associated with more rapid disease progression.