Elevated serum macrophage inhibitory factor-related protein (MRP) 8/14 levels in advanced HIV infection and during disease exacerbation

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To assess the value of MRP 8, MRP 14, and MRP 8/14 serum concentrations as markers of disease progression in HIV infection and as markers of intercurrent infections. DESIGN: We measured MRP 8, MRP 14, and MRP 8/14 serum concentrations in 184 HIV-infected patients in various stages of disease with or without disease exacerbation and in 50 healthy control subjects. In clinically stable HIV-infection correlations of MRP levels with stage of HIV disease, CD4 counts, p24 antigen, and beta-2 microglobulin levels were studied. In patients with intercurrent illnesses, correlations of MRP levels with type of disease exacerbation and with CRP were calculated and compared with those found in stable HIV infection. RESULTS: MRP 8/14 levels were significantly elevated and MRP 8 levels slightly decreased in stable HIV infection compared with HIV-negative controls. The CD4 cell count and MRP 8/14 levels correlated significantly in patients with AIDS. Despite higher values of MRP 8/14 during advanced disease, these were not significant predictors of progression to death. In patients with acute infections, MRP 8/14 levels were significantly elevated, compared with patients with illnesses of noninfectious origin. Levels of MRP 8/14 associated with acute infections were significantly higher in patients with AIDS than in patients during earlier stages of HIV infection. CONCLUSIONS: Both stable HIV infection and advanced immunodeficiency are associated with an elevation of the MRP 8/14 complex and probably with a decline of MRP 8 serum levels. MRP 8/14 is preserved as a marker of acute infection in immunocompromised patients.