

ABSTRACT

Chronic HIV-1 infection induces severe immune alterations, including hyperactivation, exhaustion, and apoptosis. In fact, viral control has been associated with low frequencies of these processes. Here, we evaluated the expression of activation and inhibitory molecules on natural killer (NK) and CD4⁺ T cells and plasma levels of proinflammatory cytokines in individuals exhibiting viral control: a cohort of HIV-1-exposed-seronegative individuals (HESN) and a cohort of HIV controllers. There was lower expression of CD69, LAG-3, PD-1, and TIM-3 in both cohorts when compared to a low-risk population or HIV progressors. In addition, HIV controllers exhibited lower plasma levels of proinflammatory molecules TNF- α and IP-10. These findings suggest that individuals exhibiting viral control have lower basal expression of markers associated with cellular activation and particularly immune exhaustion.