

Abstract

Flow cytometric analyses were performed to evaluate HLA-DR (+) activated T lymphocytes (Tact; CD3 (+)/CD4 (+)/CD25 (medium)) and T regulatory cells (Treg; CD3 (+)/CD4(+)/CD25(high)) in the circulation of children 8-10 years of age living in an area endemic for both *Plasmodium falciparum* and *Schistosoma mansoni* in western Kenya. Those children with only *S. mansoni* had a higher mean percentage of HLA-DR (+) Tact than those who were co-infected with these two intravascular parasites. The proportion of circulating Treg was comparable in children with only schistosomiasis and both schistosomiasis and malaria. However, the mean level of memory Treg (Treg expressing CD45RO (+)) in those with dual infections was lower than in children with schistosomiasis alone. These imbalances in Tact and Treg memory subsets in children infected with both schistosomiasis and malaria may be related to the differential morbidity or course of infection attributed to coinfections with these parasites.