

ABSTRACT

A better understanding of the mechanism of anemia associated with *Schistosoma mansoni* infection might provide useful information on how treatment programs are implemented to minimize schistosomiasis-associated morbidity and maximize treatment impact. We used a cross-sectional study with serum samples from 206 Kenyan school children to determine the mechanisms in *S. mansoni*-associated anemia. Serum ferritin and soluble transferrin receptor levels were measured by using an enzyme-linked immunosorbent assay. Results suggest that *S. mansoni*-infected persons are more likely (odds ratio = 3.68, 95% confidence interval = 1.33-10.1) to have levels of serum ferritin (> 100 ng/mL) that are associated with anemia of inflammation (AI) than *S. mansoni*-uninfected children. Our results suggest that AI is the most common form of anemia in *S. mansoni* infections. In contrast, the mechanism of anemia in *S. mansoni*-uninfected children was iron deficiency. Moreover, the prevalence of AI in the study participants demonstrated a significant trend with *S. mansoni* infection intensity ($P < 0.001$). Our results are consistent with those observed in *S. japonicum*-associated anemia.