Urinary soluble egg antigen levels in Schistosoma haematobium infection in relation to sex and age of Kenyan schoolchildren following praziquantel treatment.

Kihara JH, Njagi EN, Kenya EU, Mwanje MT, Odek AE, van Dam G, Kahama AI, Ouma JH.

Schistosoma haematobium soluble egg antigen (SEA) secreted in urine can be assayed to determine egg tissue load and hence morbidity in infected individuals. A cohort of 158 infected children aged 4-18 years was followed-up for 33 days pre and post treatment with a single dose of praziquantel. There was a significant difference in the prevalence of S. haematobium between males and females (P < 0.05). There were also significant differences in egg counts between age group < or = 5 years compared with 6-8 years, 9-11 years and 12-14 years, and age group > or = 15 years compared with 6-8 years, 9-11 years and 12-14 years (P < 0.05). Comparison of SEA among age groups indicated a significant difference between age group < or = 5 years compared with 9-11 years, 12-14 years and > or = 15 years, and age group > or = 15 years compared with 9-11 years and 12-14 years (P < 0.05). There was a statistically significant correlation between levels of SEA and egg output (r²=0.961, P=0.010). These results are useful in the development of a SEA-based dipstick assay for field diagnosis of urinary schistosomiasis.