Daily Variation of Schistosoma haematobium Egg Excretion

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Eggs of *Schistosoma haematobium* were collected by two methods for 62 schoolboys for 3 days of a week in a urinary schistosomiasis endemic community of coastal Kenya. Spontaneous urine after 10:30 am was collected and 10ml of the urine was filtered for collecting eggs. This method is referred as the 10ml spontaneous urine method (eggs/10ml). The second urine, one hour after the previous spontaneous urine was collected and all the volume of the urine was filtered for collecting eggs. This method is referred as the one-hour urine method (eggs/hour). Prevalence of egg-positive after three urine examinations was 95.2% for egg/10ml and 93.5% for egg/hour. Three-day mean of log converted eggs/10ml and eggs/hour of each boys correlated very well (R=0.866), although the value of egg/hour was twice larger than that of egg/10ml (mean of log (1+eggs/hour) was 2.33 with standard deviation (SD) of 1.04, and mean of log (1+eggs/10ml) was 2.01 with SD of 0.92. paired t-test, p<0.001). Mean of coefficients of variance (CV) of log converted egg/hour was 23.5% and smaller than that of egg/10ml was 32.4% (p<0.05). The value of the CVs measured in a week seemed smaller than that of three repeated measures over three months.