

Abstract

Relationships of *S. haematobium*, hookworm and malarial infections to growth 6 months after metrifonate treatment were studied in Kenyan primary school children in an area where poor growth, *S. haematobium* and hookworm were common and malaria was endemic. All children with light-moderate *S. haematobium* infections (1-500 eggs/10 ml adj) in 4 schools were examined (Exam 1), allocated at random to either placebo (MIP, n = 198) or metrifonate treatment (MIT, n = 201) groups, treated, and examined again 6 months later (Exam 2). An additional 19 heavily infected children (HIT group greater than 500 eggs/10 ml adj) were treated immediately after Exam 1 and also followed. The MIT and HIT groups exhibited more rapid growth between Exam 1 and 2 than did the placebo group. The MIT group gained significantly (P less than 0.001) more than the MIP group in weight (0.8 kg), percent weight for age (2.3 percentage points), weight for height squared (0.04 units), arm circumference (0.4 cm), percent arm circumference for age (1.7 percentage points) and in triceps and subscapular skinfold thicknesses. In addition, the placebo group showed statistically significant decreases between exams in percentage weight for age, percent arm circumference for age, both skinfold thicknesses for age and no significant increase in percent height for age while the MIT group exhibited highly significant increases in all anthropometric parameters.(ABSTRACT TRUNCATED AT 250 WORDS)