

Abstract

The reduction in hookworm egg counts was determined in children treated with 1 and 2 doses of metrifonate. Kenyan primary school children were allocated to receive either 10.0 mg (n = 53) or 7.5 mg (n = 53) of metrifonate per kg of body weight (mg/kg) or a placebo (n = 26). Two doses of 10.0 mg/kg reduced hookworm egg counts (from arithmetic means of 4,177 to 438 eggs per gram of feces [epg]) more than did 2 doses of 7.5 mg/kg (from 4,329 to 1,392 epg; P less than 0.01). Two doses of metrifonate reduced egg counts more than did 1 dose (P less than 0.0001). The placebo group did not show a significant change in egg counts. The single dose of 10.0 mg/kg led to a 78% reduction in hookworm egg counts (from 4,177 to 918 epg), a level unlikely to cause iron deficiency anemia. This was as effective as 2 doses of 7.5 mg/kg, and was more easily administered than 2 or 3 doses. The further reduction after a second dose of 10.0 mg/kg (to 438 epg) is probably not of practical importance. This study shows that metrifonate, even in a single dose for treatment of *S. haematobium*, is also useful in reducing hookworm egg counts.