Abstract

We studied growth in infected children given one dose (600 mg) or two doses of albendazole per school year. Children were examined and allocated at random within sex by descending hookworm egg count to one of three groups: placebo (n = 93), one dose (1x, n = 96) or two doses (2x, n = 95). Each child was treated and then re-examined and treated 3.6 and 8.2 mo later (Exams 2 and 3). The 1x and 2x groups gained significantly more by Exam 3 than the placebo group in weight (1.1 and 0.9 kg more, respectively), percent weight-for-age (3.3 and 2.7 percentage points more), percent weight-for-height (3.1 and 2.9 percentage points more), percent arm circumference-for-age (2.3 and 2.0 percentage points more) and triceps and subscapular skinfolds but did not differ significantly from each other. The placebo group showed significant decreases between exams (P < 0.0002) in percent weight-for-age and percent arm circumference-for-age and no change in percent weight-for-height, whereas the 1x and 2x groups exhibited significant increases (P < 0.005). At Exam 3, arithmetic mean egg reduction rates for the 1x and 2x groups were 84 and 95% for hookworm, 42 and 32% for Trichuris and 55 and 87% for Ascaris, respectively. We conclude that one or two doses of albendazole per year resulted in similar growth improvements, despite reinfection, in school-age children in an area where these helminths and poor growth are prevalent