ABSTRACTS

Fouad R, and Cummings CE. Basic Science Division, U.S. Naval Medical Research Unit No.3, Cairo, Egypt; Health Units, Qalyubia Governorate, Egypt.

Successful treatment of bancroftian filariasis in endemic villages in Egypt with two single doses (100 μg/kg) of ivermectin given 3 months apart has been previously reported. We now report long term MF suppression using this ivermectin regimen in an identical population. One hundred sixty-one male patients aged 15-55 years had pretreatment mean MF density of 461.7 MF/ml (range: 14-2869 MF/ml), as measured by membrane filtration of 1 ml venous blood collected at 2100-2400 hours. Before the second dose (3 months after the first dose), 50 (31%) had completely cleared, and the remaining 111 had a mean MF density of 3.6% of pretreatment level. Follow-up of 155, 146, and 127 patients at 3, 6, and 9 months after the second dose indicated complete MF clearance in 60%, 45%, and 47% of patients. The MF densities in those still infected were 1.7%, 3.2%, and 6.1% of the pretreatment level. These results show that ivermectin in 2 doses (100 μg/kg) 3 months apart cleared up to 60% of patients completely and reduced MF densities to <10% of pretreatment levels. Suppression of MF may reduce the potential for parasite acquisition by the vector, therefore reducing transmission of lymphatic filariasis in endemic areas.


In French Polynesia, where lymphatic filariasis due to Wuchereria bancroftii var. pacifica is endemic, several therapeutic trials suggested that semi annual single doses of ivermectin 100 mcg/kg could be an interesting alternative strategy as compared to DEC. Consequently, in April 1991, a mass chemoprophylaxis program based on this strategy was implemented in Opoa, a Polynesian village (population = 935). Six months after the first treatment, the microfilaremia (mf) recurrence was about 34 % of the initial one, but no significant reduction of this recurrence was observed after the 2nd and the 3rd treatment (respectively 21.7 and 31.3 %). Moreover, there was no reduction of the mf carriers prevalence (21 %; n = 595) after 3 successive mass treatments. Therefore, the dosage was raised to 400 mg/kg for the 4th round, since this higher dosage proved safe and effective from other trials. This high dosage did not induce more adverse reactions nor worse acceptability than that of 100 mcg/kg. Six months after the 4th mass treatment, the mf recurrence was 10 % and the mf prevalence 15 %. Further results are required to determine whether this strategy is effectively adequate for a filariasis control program.

PREVENTING SCHISTOSOMA HAEMATOBILUS RE-INFECTION. Abu-Elyazeed RR*, Podgore JK, Mansour NS, Youssef FG, Gere JA, and Hibbs RG. U.S. Naval Medical Research Unit Number Three, Cairo, Egypt; and U.S. Army Medical Material Development Activity, Ft. Detrick, MD.

A randomized double-blind trial was conducted to assess the efficacy of twice-weekly application of 1% niclosamide lotion to prevent S. haematobium re-infection. Farmers in Fayoum, Egypt, aged 18 to 40 were treated to cure their S. haematobium infection then randomly assigned to self-apply niclosamide or placebo lotion to limbs and trunk. Subjects were exposed to infested water during irrigation from April to October 92. Three hundred fifty subjects did not excrete S. haematobium ova during the first 4 months of lotion application and completed the trial, 169 (48.3%) in the niclosamide group and 181 (51.7%) in the placebo group. The niclosamide group was comparable to the placebo group in age, total water contact (102 vs 109 hrs), reported lotion application compliance (93.5% vs 90.6%) and reported water contact beyond lotion application areas (5.3% vs 3.3%). The re-infection rates were 30.8% in the niclosamide and 28.2% in the placebo groups. Thus, twice weekly application of 1% niclosamide lotion did not prevent re-infection. Previous studies in monkeys showed that...
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