161 Ismail, MM; Weil, GJ; Jayasinghe, KS; Premaratne, UN; Abeyewickreme, W; Rajaratnam, HN; **Sheriff, MHR**; Perera, CS; Dissanaike, AS

Prolonged clearance of microfilaraemia in patients with bancroftian filariasis after multiple high doses of ivermectin or diethylcarbamazine. JArticle Transctions of the Royal Society of Tropical Medicine and Hygiene Vol: 90 No.(6) 1996_.684-688pp

Abstract :In a double-blind trial on 37 asymptomatic microfilaraemic subjects (minimum 400 microfilariae [mf] per mL) with Wuchereria bancrofti infection, the safety, tolerability and macrofilaricidal efficacy of 12 fortnightly doses of ivermectin, 400 micrograms/kg (ivermectin group), was compared with 12 fortnightly doses of diethylcarbamazine (DEC), 10 mg/kg (DEC group), over a period of 129 weeks after treatment. A control group (LDIC group) was treated with low dose ivermectin to clear microfilaraemia, for ethical reasons. Both ivermectin and DEC in high multiple doses were well tolerated and clinically safe. Macrofilaricidal efficacy was assessed by prolonged clearance of microfilaraemia, appearance of local lesions, and reduction of circulating W. bancrofti adult antigen detected by an antigen capture enzyme-linked immunoassay based on the monoclonal antibody AD12. Mf counts fell more rapidly after ivermectin than after DEC, but low residual mf levels were equivalent in these groups after week 4. Conversely, filarial antigen levels fell more rapidly after DEC than after ivermectin, but low residual antigen levels in these groups were statistically equivalent at all times beyond 12 weeks. Mild, self-limited systemic reactions to therapy were observed in all 3 treatment groups. Local reactions, such as development of scrotal nodules, were observed in several subjects in the DEC and ivermectin groups. These results suggested that high dose ivermectin and DEC both had significant macrofilaricidal activity against W. bancrofti, but neither of these intensive therapeutic regimens consistently produced complete cures. Thus, new drugs or dosing schedules are needed to achieve the goal of killing all filarial parasites in the majority of patients.