

A-01: Microfilaria prevalence and clinical manifestations of bancroftian filariasis in three villages in Matara

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The objectives of the ongoing Filariasis Research Project in three villages, Polhena (population, 3000), Madihe (2500) and Walgama (6000), in Matara, are to study the baseline epidemiologic parameters and assess the efficacy of two intervention measures (i) mass treatment of community with single spaced dose of 6 mg/kg b.w. of diethylcarbamazine citrate (DEC) (ii) use of curtains and bednets impregnated with permethrin in houses, to reduce the man-vector contact.

In a mass blood survey, samples of (a) 60 μ l of finger prick (FP) blood smeared on a slide and (b) 1 ml of venous blood mixed with anticoagulant for Nuclepore (NP) filtration were taken from each person. The FP smears and NP filters were stained with Giemsa and examined for microfilariae (mf).

Mf rates upto June 1993 using (FP) were, 4.2% in Polhena from 525 people examined, 4.8% in Madihe from 1137 people and 6.8% in Walgama from 993 people. For the total area the mf prevalence rate was 5.2%. The rate for males was 6.7%, for females 4.4%. The highest mf rates for males was 17.5%, for females 9.1% in the 50-60 age groups. The mf rate in Polhena using NP technique was 9.4%. The mf density by FP method ranged from 2 to 700 with a mean of 20.

Clinical manifestations identified were fever episodes with lymphangitis and adenitis, elephantiasis and hydrocoele. Investigations upto May 1993 showed a disease rate of 9.7%; males 11.8% and females 8.1%. 94.1% of the symptomatic cases were mf negative. While fever episodes with lymphangitis occurred among all age groups above 10 years the chronic conditions were evident in age groups over 30 years.

Assistance under the Project Development Grant No.920337 from the Div. of Tropical Diseases Research, World Health Organization, Geneva, Switzerland, is acknowledged.