

## **Bancroftian filariasis in Kwale District of Kenya. I. Clinical and parasitological survey in an endemic community**

Estambale, Benson; Simonsen, PE; Knight, R; Bwayo, JJ

Date: 1994-04

### **Abstract:**

A cross-sectional parasitological and clinical survey for *Wuchereria bancrofti* infection was carried out in an endemic community of south-eastern Kenya, to obtain background epidemiological information for detailed serological studies on bancroftian filariasis in the same community. Quantitative examination of night blood samples (100 microliters) from 1129 individuals (76% of the population), using the counting chamber technique, revealed circulating microfilariae in 13.7% of the study group. Prevalence increased with age, and was higher in males (15.9%) than in females (11.6%). The geometric mean intensity among infected individuals was 223 microfilariae/ml blood (336 microfilariae/ml for males and 212 microfilariae/ml for females). Approximately 16.5% of the males aged > or = 15 years had hydrocele and 2.4% of the population had elephantiasis. The prevalence of these conditions increased with age; in those aged > or = 50 years, 23.8% of males had hydrocele and 6.1% of the total population had elephantiasis. Acute cases of epididymo-orchitis, adenolymphangitis and funiculitis were also seen. The microfilarial prevalence in males with hydrocele was not significantly different from that in asymptomatic males, but none of the elephantiasis cases had microfilaraemia. The striking difference in microfilaraemia pattern between hydrocele and elephantiasis patients may reflect different mechanisms underlying the development of these two chronic manifestations. The overall prevalences of microfilaraemia and clinical manifestations in this community were moderate when compared with those found in other studies carried out along the coast of eastern Africa