Hepatosplenic schistosomiasis in Kenya: an assessment of the enzyme-linked immunosorbent assay (ELISA)

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Abstract:

Sera from 124 adult Kenyan patients with chronic splenomegaly and from 93 geographically matched controls without splenomegaly were tested for evidence of Schistosoma mansoni infection by enzyme-linked immunosorbent assay (ELISA). Ova of S. mansoni were detected on stool or rectal snip examination in 23.4% of all patients, whereas 57.3% had a positive ELISA. All patients with parasitological or histological evidence of schistosomal infection had a positive ELISA, and a negative test reliably excluded schistosomiasis. On the basis of liver histology, 23 patients (18.5%) were considered to have hepatosplenic schistosomiasis, of whom 17 (73.9%) had a positive stool or snip. The ELISA was positive in 47.5% of cases of non-schistosomal splenomegaly, and in 52.7% of apparently normal controls. This high seropositive rate in the latter two groups emphasizes that schistosomal infection does not signify disease, and limits the diagnostic value of the test in individual cases of splenomegaly. Marked tribal and, therefore geographical, differences were noted in the prevalence of infection.