

Serodiagnosis of human intestinal schistosomiasis

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We developed an enzyme linked-immunosorbent assay (ELISA) for serodiagnosis of *Schistosoma mansoni* infection using a purified immunogenic fraction from schistosome adult worm, obtained by SDS-polyacrylamid gel electrophoresis. Sera from patients with active schistosomiasis (egg passers; n=10); inactive schistosomiasis previously treated with praziquantel (not passing eggs; n=10); fascioliasis, hydatosis (n=5); and healthy controls (n=10) were examined. Western blot analysis revealed that the Sm 31/32 KDa fraction of *Schistosoma mansoni* is recognized by sera from of both active and inactive schistosomiasis. ELISA IgG reactivity (optical density, OD) to Sm 31/32 KDa fraction by ELISA was significantly higher in sera of schistosomiasis patients (active and inactive), ($p < 0.001$) compared to normal controls, while no significant difference was detected between active (OD=0.79 +/- 0.23) & inactive (OD=0.87 +/- 0.37) patients. No reactivity was detected using facioliasis or hydatosis sera. The overall level of specificity and sensitivity attained was 90% and 93%, respectively. It is concluded that the developed Sm 31/32 KDa ELISA may be of value in serodiagnosis of active and inactive intestinal *Schistosoma mansoni* infection in humans.