COMPARISON OF INDIRECT HAEMAGGLUTINATION TEST AND ELISA IN RELATION TO KATO METHOD FOR DIAGNOSIS OF SCHISTOSOMA MANSONI

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Abstract:

This study aimed to compare three methods for diagnosis of intestinal schistosomiasis, Kato-katz technique, ELISA and IHA, and to evaluate the results obtained by these techniques with their sensitivity and specificity. This work was conducted on 75 patients: 46 of them were below 25 years age and 29 were above, 48 of them were males and 27 were females. They were complaining of different manifestations of intestinal schistosomiasis, subjected to history taking and clinical examinations. Stool examination was performed by Kato-Katz technique. Blood samples were withdrawn for antibodies against S. mansoni by ELISA and Indirect Haemagglutination test (IHA). S. mansoni eggs were detected among 38 (50.7%) by microscopic examination (18 of them <25 years and 20 cases ≥25 years of old), while antibodies were recorded among 43 (57.3%) and 45 (60%) by both ELISA and IHA respectively, non significant differences were recorded between the three applied methods of examination. On comparing IHA with Kato-Katz technique as gold standard method of diagnosis, it showed 80% sensitivity and 93.3% specificity. On other hand ELISA revealed high sensitivity and specificity 96.9% and 90.7% respectively. On comparing Kato-Katz technique to IHA it showed low sensitivity and specificity; 78.9% and 59.5% respectively.

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