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Abstract

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A dot immunobinding assay (DIA) on nitrocellulose membrane for the serological detection of antibodies to *Entamoeba histolytica*

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Abstract

A rapid, cheap, simple and specific serological test of adequate sensitivity for detecting IgG antibodies against *Entamoeba histolytica* antigen is described. Axenically cultured amoebic antigen was used to precoat the nitrocellulose membrane. The strips were incubated with test samples and later with horseradish peroxidase (HRPO) labelled protein-A conjugate. A dark blue spot was obtained by treatment with peroxidase substrate, 4-chloro-1-naphthol, in positive samples. Serum samples from 32 healthy controls, 45 patients with acute amoebic liver abscess and 10 asymptomatic *E. histolytica* cyst passers were tested. This test was positive in 93% of cases of amoebic liver abscess, 3% of healthy controls and none of the cyst passers; its sensitivity (97%) and specificity (93%) were as good as that of the ELISA test and, because it is simple, quick and cheap it is recommended as a serological test of choice for the diagnosis of invasive amoebiasis.