

Annotated Bibliography on Laboratory Diagnosis of Diarrhoeal Diseases 1985-1981

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Abstract

A dot immunobinding assay (DIA) on nitrocellulose membrane for the serological detection of antibodies to *Entamoeba histolytica* described. The experiment was carried out by the Department of Gastroenterology and Human Nutrition of the All- India Institute of Medical Sciences, involving 32 subjects comprised of normal healthy controls and 45 patients with amoebic liver abscess. *E. histolytica* cyst passers were included in the study. The normal control group males and females of different socio-economic status. Only one of the 32 healthy controls gave a positive dot test. The remaining 31 included 28 samples which were completely negative and gave no colour on the dot test and three samples which gave a mild blue discolouration which were considered negative for the purpose for this study. There was no difference when in 15 cases on washing with tris-saline buffer there was complete removal of red blood cells and no interference with intensely of the final colour of the product. Forty- Two of the 45 samples collected from those with amoebic liver abscess gave a deep blue colour (Positive test) while the remaining three gave slightly blue discolouration and these samples were taken as negative. All blood samples were then run simultaneously in the protein enzyme-linked Immunosorbent assay (ELISA) technique. A test of proportions was applied. No difference in sensitivity and specificity for serological diagnosis of amoebic liver abscess was noted between the dot Immunobinding technique on nitrocellulose members and the ELISA done on micro – ELISA plates.

References

144. Gandhi, B.M. (1986) A dot immunobinding assay (DIA) on nitrocellulose membrane for the serological detection of antibodies to *Entamoeba histolytica*. Transactions of the Royal Society of Tropical Medicine and Hygiene 80, 883–885.