Detection of E. histolytica, G. lamblia and Cryptospridium Copro-Antigen in stool samples J.of Egyptian Society of Parasitology,vol.(32)No.(1) Aprif 2002

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Abstract:

Abstract A double antibody sandwich ELISA technique, using a chromatography purified antisera against E. histolytica, G. lamblia and Cryptosporidium antigens, was applied to detect copro-antigens of the corrosponding parasites in 90 patients. All positive cases were diagnosed by parasitological examination and proved to have the infection solely. Beside the 90 positive cases, 40 age-matched controls were included in the study, of which 20 individuals were infected with other parasites but not Cryptosporidium, E. histolytica or G. lamblia (acted as an infected control group) and the other 20 individuals with no intestinal parasites (normal control group). The assay could detect 100% of those infected with both of G. lamblia and E. histolytica and 96.6% (29/30) of patients with Cryptosporidium infection. False positive reactions were detected in 3 cases using G. lamblia antisera (92.5%), 5 cases using E. histolytica antisera (87.5%) and 2 cases using Cryptosporidium antisera (95%). A direct increase in the mean antigen level was observed with the increasing intensity of infection in the 3 parasites, so higher mean O.D. readings was observed in heavily infected cases than moderately infected cases than lighter intensity of infection. Only those in elder age group (> 20 years) infected with E. histolytica were found to have statistically higher O.D. readings of the antigen than middle age group (10-20 years). On the other hand, no statistically significant difference was observed between different age groups and antigen level in cases with either G. lamblia or Cryptosporidium.

Keywords:

E. histolytica, G. lamblia, Cryptospridium Copro-Antigen

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