ANOTATED BIBLIOGRAPHY

Parasitic Diseases of the Gastrointestinal Tract

Annoted references in this issue have been contributed by Drs. T. Rajendranathan, PM Ravindran, KR Thampuran and V Balakrishnan, Department of Gastroenterology, Medical College Hospital, Thrissur. The following references have been discussed:


A highly sensitive and specific RIA method to detect circulating amebic antigens in PEG precipitates of sera from amebiasis patients. The major improvement toward developing specific assay has been the cross-reactivity of sera from amebiasis patients. This study has overcome the problem of cross-reactivity of serum proteins; this has been overcome by the present study. A study from Calcutta.


Examinations critically several aspects of serological diagnosis of amoebiasis, especially amoeboma study (Tiess and Moham). In general, advises cautious interpretation and further work.


A case of chronic cryptosporidiosis in a child with primary immunoglobulin deficiency, ending fataly, is described.


A case of intractable chronic giardiasis was studied with regard to tropohyosomes and Giardia isolate (strain). Cytology of 12 strains of giardiasis and trophozoites resulted in cure. Reduced cytolytic activity for Giardia was considered to have caused persistence of infection.


Cytotoxicity and neutral proteinase activity of clarified homogenate of different strains of Entamoeba histolytica were studied and evaluated, with evidence of the strain. Virulence was well correlated with neutral proteinase activity and greater cytotoxic activity. It is postulated that E. histolytica may be a neutral proteinase.


Gel-filtered amebic toxin (mol wt 10-30 X 10^{6}) proteinase activities were assayed on human starch at pH 5.6 or on bacterial cells at pH 4.2. Cytotoxic activity was inhibited by amebic proteinase, leucine and aspartic protease. Treatment with cysteine resulted in increased proteinase and cytotoxic activity. Further details of purification and characterization are described.


Critical evaluation of eight published reports (three from India) on the efficacy of metronidazole, quinacrine and furazolidone in the treatment of giardiasis. The first two studies showed a cure rate of 88-97%.


Parasite cure rate of non-invasive amoebiasis after treatment with tinidazole 800 mg three daily or tinidazole 800 mg daily was 100%.


The experience of treating 30 children with amoebic disease from Libya over a period of 5 years is described.


A study which suggests a high risk of individuals with a particular hapten antibody phenotype for developing amoebiasis.


The high incidence of nodular lymphoid hyperplasia of the upper small intestine in giardiasis is described and the possible pathogenesis is explained. A study from Calcutta.


A leading article which reviews the chemotherapy of hydatid disease.


Evolution of liver hydatid cysts treated with mebendazole 15-45 mg/kg/day for 4-6 days each was prospectively studied. Cysts disappeared in three, in one it regressed and in one a new cyst developed on stopping treatment. The others were not affected.


A case report of colitis caused by Dientamoeba fragilis. Describing clinical, radiological, endoscopic and histological findings to suggest that D. fragilis causes an invasive ulcerating colitis.


Albendazole is single dose of 400 mg cured 86% and 93% of patients with hookworm and Ascaris infections respectively, while 200 mg for 3 days cured 95% and 100% respectively.


A study showing the higher sensitivity of ELISA in the detection of antibodies in amebic liver abscesses and dysentery.


Describes the effectiveness of amebicidal phosphate 150 mg twice a day for 10-20 days in eradicating parasites (100%) and in reversing the malabsorption of fat, d-lactose and vitamin B12 (50%) in giardiasis. Addition of tetracycline did not improve absorption in these patients.


Altered drug metabolizing enzyme activity induced in liver by amebic infection is not corrected by treatment with amebicidal drugs.


Experimental study in guinea pigs that demonstrated increased severity of total aterosclerosis and higher incidence of liver abscess following cholesterol feeding. Moreover, the amebic antibody levels in the cholesterol fed animals were also higher than in control animals.


Gluteraldehyde infected mice had significant depression of cholesterol, especially free cholesterol, but no significant change in the atherogenic index. A study from Calcutta.
and dry weight. A depression in all phospholipid and neutral lipid fractions was also observed.

21. 

Study comparing the sensitivity of ELISA and indirect fluorescent antibody test in the diagnosis of amebiasis. The two techniques were found to be equally sensitive.

22. 

Blast transformation of splenic lymphocytes and intestinal absorptive functions were studied in Giardia infected mice on different pre-infection days. An increase in the stimulation index of lymphocytes and in the inhibition of uptake of nutrients occurred. The latter declined with the decrease in the trophozoite count.

23. 

A new entity due to the invasion of clostridial macrophages by filamentous larvae of Strongyloides stercoralis in an immunologically competent person, presenting as haematocytic infiltration and diffuse abdominal pain, is reported.

24. 

Epidemiological survey by CEP test shows the point prevalence of coffee-coffee in Northern Greece as 11.0 per 100,000, of which about 9% were surgically confirmed, the rest being asymptomatic.

25. 

New anthelmintic drug Albendazole given in single dose of 400 mg, 800 mg and 1600 mg to patients with single or mixed infections with Ascaris, Trichuris and hookworms, gave nearly complete cure in Ascaris and hookworm disease but moderate cure rates in Trichuris. Recommended single doses: Ascaris and hookworms—400 mg, Trichuris—600 mg.

26. 

Study of lymphocytes stimulated with S. stercoralis antigens, other non-parasite antigens and PHA shows that patients with chronic strongylomiasis have decreased T-cell activity as well as depressed levels of factors in the serum that inhibit parasite specific cellular response.

30. 

Prevalence of pinworm infestation studied by a new flexible plastic pinworm slide and found to be as reliable as the standard cellulose nitrate slide.

31. 

A case report of failure of treatment with mebendazole for 94 days prior to operation confirmed by development of cysts in mice inoculated with cyst material obtained after mebendazole treatment. Surgery is the treatment of choice even now. Mebendazole may be given prophylactically to prevent spread of infection at operation.

32. 

Surgical incidence of hydatidosis was the highest in rural areas of Greece. This disease was more frequent in boys, and lungs and liver were the commonest sites.

33. 

A rare case with adult Ascaris worms in stomach and duodenum, emerging through normal biliary tract and causing multiple abscesses, one of which ruptured.

35. 

Human infection with larval anisakid, a nematode of marine mammals, due to ingestion of raw fish, reported. Includes last reported human case in which the worm developed to adult stage.

36. 

A reliable procedure for visualizing and quantifying the viability of E. heliothis in larvae using dye uptake described.

39. 

Prevalence of intestinal parasitism in an industrial town—hospital based study.