

POSTER PRESENTATION

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Opportunistic protozoa in HIV seropositive cases and best stool concentration technique for detection

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Introduction

Parasitic gastrointestinal diseases increase morbidity and mortality in HIV patients. This study is aimed at the occurrence of *Cryptosporidium*, *Isospora*, *Cyclospora* and *Microsporidium* in the stool samples of HIV positive cases since the diarrhea is the second most common presentation of HIV positive cases who requires hospitalization.

Materials and methods

Stool specimen from HIV infected patients (n=100) were included. Each time specimens were divided into two portions of which one was plain and second part mixed with 10% buffered formalin saline in 3:1 ratio. Blood samples were collected for lymphocyte counts. Samples were processed and compared with Formal-Ether sedimentation and Sheather's sugar floatation technique for the detection of oocysts.

Results

Isospora belli was predominant opportunistic protozoa detected. Cryptosporidium oocysts were found in 2 cases of acute diarrhea and one case with chronic diarrhea. No Cyclospora and Microspora were detected. Sheather's sugar floatation technique is found better in concentrating the oocysts of Isospora and Cryptosporidium. Along the oocysts, 2 cases of Ancylostoma duodenale, one case of each Giradia lamblia and Strongyloides stercoralis were detected.

While testing for detection of protozoan parasites from HIV cases, it needs to collect multiple stool samples if feasible. Sheather's sugar floatation technique is superior to Formal-Ether sedimentation to detect the oocysts of *Cryptosporidium* and *Isospora belli*. Absolute lymphocyte count is probably good when used as a marker for CD4 count assessment where the facilities are not available for CD4 count testing.

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Conclusion