

ABSTRACT

Introduction: Opportunistic *Coccidia* parasites amongst other infections frequently complicate human immunodeficiency virus (HIV) infection by causing chronic diarrhea. The magnitude of these parasitic infections in HIV positive patients requires careful attention. However, there has been limited literature addressing this problem in Uganda.

Material and methods: Across sectional study was conducted at Bugembe HC/IV Jinja District from January to April 2014 with an aim of determining the prevalence of intestinal *Coccidia* and asses for immune suppression among people living with HIV/AIDS who were attending Highly Active Anti-Retroviral therapy (HAART) clinic. One hundred and forty stool samples were collected from HIV infected adults and were examined microscopically for presence of intestinal *Coccidia* parasites using iodine stained wet preparation and modified ZN staining method. CD4 T cell enumeration was done using BD FACS count for each participant.

Results: The overall prevalence of intestinal coccidiosis was 2.8% (4/140) with *Cryptosporidium* species mainly identified. Besides *Cryptosporidium* species, 18.6% (26/140) had other intestinal parasites, which included the following; 5.7% (8/140) *Entamoeba histolytica*, 5% (7/140) *Giardia lamblia*, 4.3% (6/140) *Schistoma mansoni* and 3.6% (5/140) *Strongloides stercoralis*. All the four (100%) participants who were infected with *Cryptosporidium* had a CD4 count less than 200 cell/ μ l.

Conclusion: This study shows that there is a significant association between intestinal *Coccidia* and HIV/ AIDS patients with low CD4 count ($p=0.01$). Therefore routine examination of the stool samples for *Coccidia* parasites especially *Cryptosporidium* species must be not limited to HIV infected individuals with CD4 count less than 200 cell/ μ l. The prevalence of intestinal coccidiosis is obtained in this study has an effect on morbidity and mortality especially in HIV infected patients and therefore warrants or suggests routine diagnosis and management of *Coccidia* parasites be incorporated in the routine HIV care and management.

Keywords: Intestinal *Coccidia*, CD4 count, HIV/AIDS.