Opportunistic intestinal protozoan infections in HIV/AIDS patients attending the North West regional hospital Bamenda, Cameroon

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The case definition of AIDS encompasses a spectrum of infection and malignancies, labeled as opportunistic infections. In recent years, numerous studies have outlined the emergence of opportunistic gastrointestinal protozoa that have caused diarrheal illness among HIV/AIDS patients thus affecting the quality of life in these patients. These infections are the leading cause of morbidity and mortality among these patients especially in third world countries (with Cameroon inclusive) where access to anti-retroviral is still a major public health problem. The purpose of this study was to determine the prevalence of opportunistic intestinal protozoan as well as correlate the mean parasite density with CD4+ count levels among HIV/AIDS patients attending the North West Regional Hospital Bamenda, Cameroon. A hospital base cross-sectional study design was conducted were 98 stool samples were collected from HIV/AIDS volunteers. The stool samples were concentrated using the modified Ziehl-Neelsen (Zn) technique for the detection of oocyst of the opportunistic protozoans. Also EDTA blood samples were collected for determination of CD4+ count using a FACS count analyzer. Intestinal protozoans were detected in fourteen (14) of the subjects giving a prevalence of 14.2%. Cryptosporidium parvum (12.2%) was the most predominant parasite identified among the study subjects followed by Cyclospora cayetanensis (2.2%). Majority of the participants (56%) had a low CD4+ count and recorded the highest prevalence (11.2%) of intestinal protozoans which was statistically significant (p< 0.05). This study also reported negative correlation (r= -0.66) between mean parasite density and CD4+ among HIV/AIDS subjects. This study thus ascertains the existence of intestinal protozoans among HIV/AIDS subjects attending the North West Regional Hospital, Bamenda.

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