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Association between CD4 Level and Opportunistic Intestinal Protozoan Infections in Diarrhea Suffering HIV/AIDS Patients

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Abstract : One of the major factors affecting the morbidity and mortality of HIV/AIDS patients is the immunity defect marked by decreased CD4 level. This immunocompromised condition causes the opportunistic intestinal protozoa which normally asymptomatic become symptomatic and lead to mild to severe and chronic diarrhea. The objective of this study was to find out the association between CD4 level and opportunistic intestinal protozoan infections in HIV/AIDS patients with diarrhea. A total of 39 HIV/AIDS patients suffering from diarrhea participated in this study. Each subject was examined for CD4 count in blood and collected their stool for microscopic examination to reveal opportunistic intestinal protozoa existence and species. Mean of CD4 count in HIV/AIDS patients with diarrhea was 44,49 cells/µl. The prevalence of opportunistic intestinal protozoan infection was 28,2%. The most common opportunistic intestinal protozoa were *Cryptosporidium parvum*, *Cystoisospora belli*, and *Cyclospora cayetanensis*, respectively. Bivariate analysis of this study shows no relation between variables. This study determine that there is no association between CD4 level and opportunistic intestinal protozoa infection in diarrhea suffering HIV/AIDS patients.

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