ABSTRACT

BACKGROUND AND OBJECTIVES

Diarrhoea is a major problem in HIV infection and AIDS, more so in Africa. This prospective case controlled study was undertaken to determine the prevalence and aetiology of diarrhoea among HIV infected patients in UBTH, Benin City, and the relationship between the level of cellular immunity and the aetiology of the diarrhoea.

SUBJECTS, MATERIALS AND METHODS

Between July 2004 and April 2005, one hundred and fifty consecutively selected HIV sero-positive patients who satisfied the inclusion criteria were recruited into the study. Sixty nine of these had diarrhoea while 81 had no diarrhoea. Seventy two age and sex matched HIV sero-negative patients with diarrhoea were used as controls. Freshly voided stool samples from those with diarrhoea were examined by microscopy, use of special stains and by culture.

RESULTS

The prevalence of diarrhoea among HIV-infected patients presenting in UBTH, Benin City, from this study was 46%.

Pathogens isolated included bacteria, protozoa, helminths and fungi. The most common pathogen was Cryptosporidium parvum, a coccidian protozoon, accounting for 13 (18.8%) of the 69 HIV-infected patients with diarrhoea occurring as single and mixed infections. It was not found in the control group. Candida albicans was isolated in five (7.2%) patients, while Giardia lamblia, Strongyloides stecoralis, acid and alcohol fast bacilli, and Proteus species, were each detected in two (2.9%) patients. Aeromonas species Cyclospora cayatenensis, Trichuris trichiura, were each isolated in one (1.4%) of the HIV-infected patients with diarrhoea. These pathogens were not found in the control group as well. Escherichia coli, was the most common bacterial pathogen in both the study and the control groups.

Depressed cellular immunity (CD4+ count<200) was found to be associated with a higher rate of detection of pathogens among the HIV-infected patients and Cryptosporidium parvum was the most
frequently isolated pathogen in nine (39.1%) of the patients with depressed immunity and from whom pathogens were isolated.

CONCLUSION AND RECOMMENDATION

It is recommended that HIV-infected patients with diarrhoea be thoroughly investigated for the possible aetiology to enhance proper management and empirical treatment for Cryptosporidium parvum may be tried in such settings where the laboratory facilities or expertise may not be available.