Previous reports have described cardiac involvement in 28 - 73% of patients with HIV infection. This includes pericardial effusion, pulmonary hypertension and heart failure, infective endocarditis, tumours, myocarditis and left ventricular dysfunction. The association between pericardial diseases and AIDS has been well documented.

Of interest is the observation that the incidence of AIDS-related diseases found at autopsy studies is significantly higher than the incidence of abnormalities diagnosed clinically. It is therefore possible that many AIDS patients have cardiac abnormalities that are not recognised during the course of their illness.

The number of HIV-positive patients with pericardial diseases has been reported to be increasing in Africa. Pericarditis was reported to be the most common cardiac complication of HIV infection, followed by pericardial effusion.

**METHODS**

We reviewed the records of all patients treated for pericardial diseases between August 2003 and July 2008 at University College Hospital, Ibadan, Nigeria. Data were obtained from medical, ward and theatre records. Demographic data, causes of pericardial diseases, treatment offered and outcome were recorded. Pericardial effusion was categorised into mild (<2 cm) and severe (>2 cm), based on echocardiographic evaluation of thickness. Comparisons were made between the HIV-positive and HIV-negative groups. The chi-square test was used to compare the two groups.

**RESULTS**

The total number of patients treated for pericardial diseases during the period under review was 68; 42 were HIV positive and 26 HIV negative. The mean age of the HIV-positive patients was 30 years and that of the HIV-negative patients was 53 years ($p=0.05$). HIV-positive patients were three times more likely to be male and HIV-negative patients twice as likely. Diagnoses and the causations of pericardial disease in the two groups are set out in Tables I and II, respectively. Large effusions were seen in 80% of HIV-positive patients, but only 15% were categorised as large in the HIV-negative group (Table III).

Large effusions were seen in 80% of HIV-positive patients, but only 15% were categorised as large in the HIV-negative group (Table III). The treatment offered to the patients is shown in Table IV. Pericardiostomy was performed in 15 of the HIV-positive patients and 4 of the HIV-negative patients. Four of the HIV-positive patients and 1 HIV-negative patient died. Among the HIV-positive patients, 2 died after pericardiectomy, 1 following a complication of tube pericardiostomy, and 1 while being prepared for surgery because he was haemodynamically unstable.
performed in this group. Effusions in HIV-negative patients were small and were mainly drained by pericardiocentesis. This is in keeping with the findings of other studies. Pleural effusion was associated with pericardial effusion, mainly in HIV-positive patients. This association has also been reported by Kaplan et al., and it may be related to the large size of the pericardial effusions. Other studies have reported pericarditis as the commonest pericardial condition. Tuberculosis was the commonest cause of pericardial disease in our patients. The association of tuberculosis and HIV infection has been described, although some reports suggest that tuberculosis is less common than opportunistic infections and neoplasms as a cause of pericardial disease. Of the patients in our study, 7 had malignant pericardial disease (16.7% of HIV-positive patients). Most series have reported Kaposi’s sarcoma to be the commonest malignancy in HIV patients, mainly as a result of the documented association between this malignancy and HIV infection. Purulent pericarditis was noted in the majority of HIV-negative patients. This has previously been reported from our centre.

Of the HIV-positive patients in our study, 4 (9.5%) died. Mayosi et al. reported a higher mortality rate (26%), and found mortality to be highest in those with clinical AIDS or who were haemodynamically unstable.

**CONCLUSION**

Although not commonly looked for clinically, cardiac involvement in HIV-positive patients is a reality, with pericardial effusion being the commonest mode of presentation in our environment. We advocate that patients with pericardial effusion be investigated for HIV infection, and likewise that all HIV-infected individuals should undergo periodic cardiac evaluation, including echocardiography, in order to identify sub-clinical pericardial and cardiac diseases.

**REFERENCES**


