SUMMARY

BACKGROUND

Human Herpes virus -8 (HHV-8) infection is common in Africa, but prevalence rates vary from one geographical location to another. Infection with HHV-8 is thought to be lifelong but a healthy immune system keeps it in check. Kaposi’s sarcoma occurs when a person with HHV-8 becomes immunocompromised either due to HIV/AIDS, old age or medical treatment like organ transplant and cytotoxic therapy.

Highly active antiretroviral therapy (HAART) has reduced the incidence of Kaposi’s sarcoma among persons who are fortunate to receive it, but this has not eliminated the disease. There is paucity of data showing the seroprevalence of HHV-8 antibodies in HIV infected persons with or without Kaposi’s sarcoma in our locale.

OBJECTIVE

This study was carried out to determine the seroprevalence of HHV-8 antibodies and prevalence of Kaposi’s sarcoma among HIV infected patients attending University of Benin Teaching Hospital (UBTH), Edo State, Southern Nigeria.

MATERIALS AND METHODS

This was a cross sectional study on the seroprevalence of HHV-8 antibodies among HIV infected patients in UBTH, Edo State, Southern Nigeria. A total of 100
(49 males and 51 females) consecutive patients with HIV infection and 80 (40 males and 40 females) non HIV infected controls were assessed.

A questionnaire was administered to all subjects to obtain socio-demographic and clinical information. All subjects had a detailed physical examination and physical parameters like height, weight, body mass index and blood pressure were measured.

Each subject was tested with ELISA for HIV, HHV-8 and skin biopsy for histology in those suspected to have Kaposi’s sarcoma. The student t-test was used to compare means. Comparison of proportions was done using Chi-square, degree of association was determined using odds ratio and the relationship between HHV-8 and Kaposi’s sarcoma was determined using Fisher’s Exact test. Difference was statistically significant when P-value was ≤ 0.05

RESULT

The prevalence of HHV-8 antibodies in HIV infected persons in this study was 87% and 48.8% in the non- HIV infected control. The prevalence of Kaposi’s sarcoma in HIV infected patients was 32%. Education was significantly inversely associated with HHV-8 seroprevalence (P=0.012) among the subjects and controls.

HHV-8 seroprevalence increased with age from 50% in those in age group 15-24 years and 73.3% in those in age group 55-64 years although it was statistically not significant (Ptrend =0.572).

No statistically significant association was found between: HHV-8 seroprevalence and Gender (OR, 1.65; 95% CI, 0.83-3.32); and having been married (OR, 7.04; 95% CI, 3.21-15.64; RR, 1.78). Fisher’s Exact test was used
to establish the fact that HHV-8 and Kaposi’s sarcoma in HIV infected persons were related (P<0.008).

CONCLUSION

This study showed that persons with HIV infection had a higher prevalence of HHV-8 antibodies as compared with controls. Those who were HIV infected with Kaposi’s sarcoma were all positive for HHV-8. It was discovered from the study that HAART might have been beneficial to many HIV infected persons with HHV-8 antibodies, since the HHV-8 mean titer levels of those on HAART were less than those with HIV infection but have not commenced HAART at recruitment in this study.