

**PREVALENCE OF HEPATITIS B, ASSOCIATED FACTORS AND LIVER ENZYME
PATTERN IN LYMPHOMA PATIENTS STARTING CHEMOTHERAPY AT UGANDA
CANCER INSTITUTE KAMPALA, UGANDA**

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ABSTRACT

Introduction

Hepatitis B is highly endemic in sub-Saharan Africa and South East Asia. A recent serobehaviour survey (2004-2005) estimated that one out of ten persons in Uganda has chronic hepatitis B. Hepatitis B has been reported as more frequent in patients with Hodgkin's lymphoma compared to controls in the west and are at risk of acute liver failure following treatment because of proliferation of the virus. This has been reported to lead to increase morbidity and sometimes death. None the less chemoprophylaxis with lamivudine has been found to decrease this risk and is now recommended for all cancer patients with evidence of infection of hepatitis B. Despite this knowledge no data exist on the frequency of hepatitis B infection and the frequency of liver injury among patients with lymphoma undergoing treatment for malignancy at the Uganda cancer institute, we therefore set out to determine the prevalence of hepatitis B and liver enzyme pattern in lymphoma patients initiating chemotherapy at UCI.

Objectives

The objective of the study was to determine the prevalence of HBV in patients with lymphoma initiating chemotherapy at the UCI, the associated factors and the liver enzyme patterns among lymphoma patients initiating chemotherapy at UCI.

Study design

Cross sectional study

Study setting

Uganda cancer institute, Mulago Hospital Kampala

Methods

All patients with a histopathological diagnosis of lymphoma initiating chemotherapy at Uganda cancer institute were informed of the study and requested to participate in it. Those patients who agreed to participate in the study were asked to give a written and informed consent and assent (for minors) and were recruited in the study. A questionnaire was administered to all patients who were recruited collecting socio-demographic and other risk factors for hepatitis B acquisition. Blood draws were done for HBsAg and liver function tests.

Results

One hundred and forty patients were recruited into the study; 102 were of male gender. The median age of patients in the study was 14 years. Most patients 41% came from the western region.

Overall, the prevalence of HBV among these lymphoma patients was 12%. Age more than 18 years ($p=0.003$ CI 2.22- 48.91), having had sex ($p=0.0029$ CI 1.6-24.8) and HIV infection ($p=0.0366$, CI 0.9-11.6) were all significantly associated with HBV infection.

Lymphoma patients from the Northern Uganda were likely to have HBV virus (OR= 3.5)

There was a trend towards higher AST and or ALT among patients who were HBV infected though this did not reach statistical significance

Conclusion

HBV infection is common among lymphoma patients especially those who are older, originating from northern Uganda and those who are HIV positive. Elevated liver enzymes though common in lymphoma patients with HBV infection are not significantly higher than patients with lymphoma with no evidence of hepatitis B

Recommendations

Routine testing for hepatitis B infection is recommended in all lymphoma patients starting chemotherapy.

Evidence based guidelines should be formulated to guide subsequent care for those found to have evidence of hepatitis B.