

## ABSTRACT

**Background:** The Hepatic system carries out numerous synthetic, excretion and detoxification functions, however only a minority of these can be measured by levels of products in the blood (Sulkowski et al., 2000). Patients with chronic viral illnesses such as HIV appear to be more prone to develop hepatotoxicity possibly because of impaired hepatocyte defense mechanisms (Ungo et al., 1998) or due to hepatotoxicity associated with drugs which are given to alleviate the burden of the infection (Bonacini et al., 2000).

Several earlier retrospective studies and case reports have associated liver enzyme elevations with HAART regimens. The highest percentages World Health Organization (WHO) grade 3 enzyme elevations (30%) was reported with Ritonavir which manifested with increased liver enzymes (Save et al., 1999). On the other hand, a more specific signal for hepatic injury, serum bilirubin elevation, is rarely present hence affected individuals do not present with jaundice most time (Sulkowski et al., 2000).

**Purpose:** To determine the best liver function marker in detecting drug induced hepatic injury

**Method:** The study was a cross-sectional study. We consented 150 HIV/AIDS patients attending MJAP clinic in Mulago. Samples were obtained from each participant for hepatitis B and C screening and liver function test analyses (Albumin, total protein, gamma glutamyl transferase, aspartate transaminase, alanine transaminase, alkaline phosphatase, bilirubin). Participants' baseline information for CD4 count, liver function test results and viral hepatitis status were obtained from medical archives at the clinic. Baseline and follow up results were compared with paired t – test and p value of  $< 0.05$  was considered to be significant.

**Results:** The differences between the baseline mean of Total protein and follow up mean (6 months after initiation of treatment) was not statistically significant; Albumin and alkaline phosphatase also showed a similar trend (p values  $> 0.05$ ). The rest of the markers gave increased follow up values compared with baseline values with p values  $< 0.05$ .

**Conclusion:** According to our study, serum ALT, AST, GGT and Bilirubin are the best markers for detecting drug induced liver injuries in asymptomatic HIV/AIDS patients.