Aminotransferase profile in HIV positive patients

Sir,

As known, the liver is a major part of reticuloendothelial system and is a site of HIV replication and organ for many opportunistic infections. In HIV infected individuals, abnormal biochemical test results can develop as a result of hepatic parenchymal disease. The transaminases (alanine aminotransferase and aspartate aminotransferase) are enzymes made in liver. When liver cells are damaged these enzymes leak into bloodstream. Serum transaminase levels (AST and ALT) were studied for 40 HIV positive and 40 healthy and HIV negative control cases (from Government Medical College and Hospital, Aurangabad, Maharashtra, India) with mean age of approximately 35 years. Hepatomegaly cases were excluded. The mean serum AST and ALT in control group was demonstrated to be 22.15 ± 2.67 IU/L and 17.85 ± 1.84 IU/L, which was found to be increased up to 95.85 ± 26.9 IU/L \((p < 0.001)\) and 85.67 ± 28.56 IU/L \((p < 0.001)\) in HIV positive patients. The increase was found to be statistically highly significant. Increased levels were demonstrated in HIV patients by Vazmediano et al and Von Appen et al.\(^2,3\) Poles et al. stated that up to 90% of patients with AIDS had abnormalities of the liver-associated enzymes.\(^1\) It could be concluded that the liver function tests are deranged in HIV positive patients as compared to control. The deranged serum AST and ALT levels may identify patients requiring further investigations, thus can be used as a diagnostic and prognostic tool.

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