High Frequency of HEV Seropositivity in HIV-Infected Patients in Southern Spain
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Background: HEV has been reported to be a cause chronic liver disease with rapid progression to cirrhosis in HIV-infected patients. Anti-HEV seropositivity has been observed in 9% HIV carriers in Northern Spain. Likewise, rates of seropositivity of 2.6% and 4% have been reported in HIV-infected patients with unexplained transaminase elevation in Switzerland and France, respectively. However, the prevalence of HEV infection may dramatically vary from one region to another. Moreover, the rate of evolution to chronic hepatitis C and the relevance of HEV coinfection as a cause of unexplained liver disease in HIV-infected patients remain unclear. The purpose of this study was to analyze the prevalence of HEV seropositivity and of active HEV infection, as well as the factors associated thereof in HIV-infected patients in Southern Spain.

Methodology: 611 HIV-infected patients who consecutively attended a Unit of Infectious Diseases in Seville, Southern Spain, were tested for HEV serum antibodies by EIA (Wantai, Beijing, China). Positive samples were confirmed by immunoblot (Mikrogen, Munich, Germany); those that tested positive by both procedures were considered as seropositive and were also submitted to a PCR test (Mikrogen) for serum HEV RNA. The associations between HEV seropositivity and demographics, as well as data of liver disease were analyzed.

Results: 593 (97%) subjects were born in Spain. Median age was 43 years. 416 (68%) were anti-HCV positive. 105 (17.2%) were seropositive for HEV antibodies. HEV-RNA was detected only in one subject. The older the age, the higher the rate of seropositivity: <40 years, 8.2%; 40-49 years, 17.6%; >49 years, 31.3% (p=0.00001). Among anti-HCV negative patients, the frequencies of HEV seropositivity, according to liver enzyme abnormalities, were: AST >40 UI/L: 9/14 (63%), AST ≤40 UI/L: 28/181 (16%), p=0.073; ALT >100 UI/L: 2/4 (50%), ALT ≤100 UI/L: 32/191 (17%), p=0.141; GGT >50 UI/L: 12/46 (26%), GGT ≤50 UI/L: 22/149 (15%), p=0.077.

Conclusions: The rate of exposure to HEV is high among HIV-infected patients from Southern Spain, and it increases with age, but chronic infection is very uncommon. This suggests that most cases of acute HEV infection in this setting are self-limited. However, a trend to an association exists between prior HEV exposure and data of liver disease not related with HCV. Further studies are required to establish if there is actually a causative relationship.