

Increased progression to liver disease and death in HIV-HCV compared to HBV coinfecting patients.

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Background:

Hepatitis B(HBV) and C(HCV) are associated with liver disease and progression is accelerated in the presence of HIV. We studied differences in disease progression between HCV- and HBV-co-infected HIV-positive patients.

Methods:

All HIV-1 infected patients co-infected with HBV or HCV were selected from the Netherlands ATHENA national observational HIV cohort. Patients positive for HBs-Ag were defined as HBV-co-infected. Patients positive for HCV antibodies or HCV-RNA were defined as HCV-co-infected. Liver disease was defined as having liver fibrosis, cirrhosis or hepato cellular carcinoma. Risk of liver disease and death was analysed using a Cox proportional hazards model for those patients who initiated HAART (effective HIV therapy). Time was from HAART initiation until liver disease, death, or January 1 2006. Data on liver disease was systematically collected from January 1 2001 onwards, left entry was used when HAART initiation was before January 1 2001. Time from HAART initiation until death was compared between HBV-, HCV-co-infected and the non-co-infected patients, using Kaplan Meier method.

Results:

Of the 12,257 HIV-infected patients in ATHENA, 7% were HBV-co-infected and 10% were HCV-co-infected. Among these patients, 90 developed liver disease and 231 died. Time to liver disease was associated with co-infection ($p < 0.0001$, log-rank test), but did not differ significantly between HBV and HCV-co-infected patients. Adjusted risk of liver disease was 1.34 (95% confidence interval (CI): 0.58-3.10) in HCV-co-infected patients compared to HBV-co-infected patients. 5 years after HAART 16%(CI:14-20) of the HCV-, 7%(5-10) of the HBV- and 2%(1-2) of the non-co-infected died(< 0.0001). Compared to the non-co-infected patients, HCV- infected patients were at significant increased risk of dying. Risk of dying did not differ between HBV-co-infected patients and the non-co-infected patients.

Conclusion:

HIV/HCV-co-infected patients have a faster progression to liver disease and death compared to HIV/HBV-co-infected patients, therefore all HIV/HCV-co-infected patients should be evaluated for HCV combination therapy.