ABSTRACT

BACKGROUND: Previous studies have suggested that hepatocellular carcinoma (HCC) has a more aggressive presentation and lower survival in HIV-infected patients. However, the differences in survival found in older studies may be due to a later diagnosis or to lower rates of treatment against HCC, and not to a specific negative impact of HIV infection. OBJECTIVE: To assess the impact of HIV infection on the survival of HCC in HIV-infected patients.

METHODS: Multicenter cohort study (1999-2017). The GEHEP-002 cohort recruits all the HCC cases diagnosed in HIV-infected patients from 32 centers in Spain. For this study, 339 cases diagnosed in HIV/HCV-infected patients were selected. A control population of 118 HCC cases diagnosed in HCV-monoinfected patients during the study period at the Liver Unit from the Hospital de Valme was used. The survival after HCC diagnosis and its predictors, including HIV infection, were assessed.

RESULTS: HCC was diagnosed by surveillance, considered when all scheduled ultrasound had been performed at least within 1 year prior to HCC diagnosis, in 192 (57%) and 73 (82%) HIV+ and HCV+ patients, respectively (p=0.03). In spite of similar rates of HCC diagnosis by screening, cases diagnosed in HIV/HCV-infected patients were diagnosed at advanced stages. Barcelona-Clinic Liver-Cancer (BCLC) stage at diagnosis was: 3A 133 (39.8%), 2B 28 (8.5%), 1C 118 (31.9%) and 0 D 31 (17%) in HIV+ and 4.5, 2 (17.4%), 2 (27.3%) and D (3.5%) in HCV+ patients (p=0.001). 102 (77) HIV/HCV-coinfected patients and 4 (70%) HCV-monoinfected patients diagnosed at BCLC stage 0-4, underwent curative therapies (p=0.001). 334 (73.1%) patients died, 303 (91%) of them due to HCC. The probability of death at 1-year and 2-year was 53% and 65% in HCV+ and 15% and 57% in HIV+ patients (p=0.13). In a Cox model adjusted by age, sex, alcohol consumption, HIV infection and previous SVR, the independent predictors of mortality were BCLC stage at presentation, alpha-fetoprotein levels and lack of previous ultrasound surveillance. HIV infection did not show any trend for an independent association (HR 1.07; 95% CI: 0.74-1.56; p=0.2).

CONCLUSION: HIV coinfection has no impact on the survival after the diagnosis of HCC in HIV-infected patients. Although the mortality of HCC is somewhat higher in HIV/HCV-infected patients, these differences seem to be related with a later diagnosis of HCC in HIV-infected patients and not with HIV infection itself or a lower access to HCC therapy.

OBJECTIVE

To assess the impact of HIV infection on the survival of HCC in HIV-infected patients.

Conclusions

HIV coinfection has no impact on the survival after the diagnosis of HCC in HIV-infected patients.

Although the mortality of HCC is somewhat higher in HIV/HCV-infected patients, these differences seem to relate with a later diagnosis of HCC in HIV-infected patients and not with HIV infection itself or a lower access to HCC therapy.

Patients and methods

Study design


Patients

The GEHEP-002 cohort (ClinicalTrials.gov ID: NCT02785335) recruits HCC cases diagnosed in HIV-infected patients from 32 centers from Spain. For this analysis, HCC cases diagnosed in HIV/HCV-infected patients were selected. A control population of 118 HCC cases diagnosed in HCV-monoinfected patients during the study period at the Liver Unit from the Hospital de Valme was used.

Clinical data and follow-up

Survival of HCC was done by the performance of an abdominal ultrasound every 6 months.

HCC staging and treatment were established by the Barcelona-Clinic Liver Cancer (BCLC) staging system. Management of HCC was done according to EASL recommendations.

Statistical analyses

The survival after HCC diagnosis and its predictors, including HIV infection, were assessed.

RESULTS

BACKGROUND

Previous studies have suggested that hepatocellular carcinoma (HCC) has a more aggressive presentation and lower survival in HIV-infected patients. However, the differences in survival found in older studies may be due to a later diagnosis or to lower rates of treatment against HCC, and not to a specific negative impact of HIV infection.

OBJECTIVE

To assess the impact of HIV infection on the survival of HCC in HIV-infected patients.

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