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Letter to the Editor

Hepatitis C-related hepatocellular carcinoma: diagnostic and therapeutic management in HIV-patients

Dear Editor,

We read with great interest the review by D'Aleo et al[1], recently published on Eur Rev Med Pharmacol and titled "Hepatitis C-related hepatocellular carcinoma (HCC): diagnostic and therapeutic management in HIV-patients". It is a very interesting topic considering the aging of HIV-positive patients, the role of HCV-HIV coinfection and always greater efficacy of antiretroviral therapy (ART) in this particular setting of patients.

This complete and exhaustive review needs some considerations to highlight the importance of multidisciplinary approach to this particular setting of patients.

Thank to the efficacy of ART into the clinical setting, there was a striking impact on the clinical outcome of HIV-related cancers. The range of cancers diagnosed among patients infected by HIV/AIDS includes AIDS-defining diseases (ADC – Kaposi's sarcoma and non-Hodgkin's lymphoma) and non-AIDS-defining cancers (NADC – Hodgkin's disease, invasive anal carcinoma, lung carcinoma, skin cancer, colorectal cancer, and HCC). In fact, after the introduction of ART, a decrease in ADCs and an increase in NADCs was observed due to the aging of HIV-positive cancer patients[2-6].

The use of ART has reduced the risk of developing AIDS and has greatly increased the life expectancy of HIV-infected individuals in Western Countries[6]. As such, an increasing number of HIV-infected individuals are now at risk to develop cancers that typically occur with aging[7,8].

Given the increasing burden of cancer in the aging HIV-infected patients, effective strategies to treat cancer in this population are needed[7].

Zucchetto et al[9] evaluated the mortality for NADCs among 10392 Italian patients with AIDS, diagnosed between 1999 and 2006 and compared with the general population of the same age and sex. NADCs were accounted as the underlying cause of death for 7% of HIV-infected-patients. The authors found a 6.6-fold increased risk of death for NADCs among patients with AIDS, especially due to cancers with viral etiologies: significantly elevated standardized mortality rates (SMRs) were found for anal cancer, a human papilloma virus-associated tumor (SMR 270), Hodgkin's lymphoma, associated with Epstein Barr virus (SMR 174) and HCC, associated with chronic hepatitis B and C virus infections (SMR 11.1). Despite this evidence, to date many HIV-positive patients are undertreated due to only medical discriminatory attitude. Many studies[10-12] have demonstrated that, if the therapeutic approach is multidisciplinary and performed at highly specialized centers, the results, in terms of response to treatment, toxicities and overall survival, are comparable with those of the general population.

In this review, the authors well described the diagnostic and therapeutic management of Hepatitis C-related HCC in HCV-HIV co-infected patients.

Several therapeutic options are available depending on several factors as HCC stage, liver functions, comorbidities. They have been divided into 3 groups: 1) potentially curative; 2) proven effective but not curative; 3) unproven or ineffective therapy. About diagnosis, in our opinion, the role of biomarkers has a crucial function specially for prognostic aspects[13,14].

Another important aspect is the management of HCV-HIV co-infection, specially for rapid progression from liver cirrhosis to HCC, not only due to immunosuppression, but also with a direct effect of HIV on hepatic stellate cells[15]. According to Tuyama et al[16] these cells may play a critical role in the progression of liver fibrosis. HIV infection also causes indirect liver cirrhosis due to its therapy and sometimes implemented by the use of other drugs, necessary to treat other comorbidities

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and/or clinical aspects. Regarding surgical treatment, it is able to offer real advantage in term of healing[12]. Before the surgical approach is mandatory, the evaluation of liver functional reserves to select correctly the patients. Recently, thanks to more knowledge about clinical and prognostic characteristics about HIV-HCV co-infected patients and HCC, liver transplantation (LT) offers an ever better rate of long-term survival, after 5 years, also in this particular setting of patients[3,11,12]. The improved outcomes in LT, in this setting, are also possible thank to ART and new drugs to handle potential LT complications[17,18].

About medical treatment, in the recent years, the scenario is very broad; thank to new generation drugs, the outcomes in this patients, in term of progression free survival and overall survival, are improved[2,19] as well as the quality of life. Unfortunately, recent studies suggest that HIV-infected individuals are significantly less likely to receive cancer treatment compared to uninfected individuals and probably only on the basis of poor knowledge and prejudices.

In conclusion, we think that this kind of manuscripts are important to improve the knowledge about HCC in this particular setting of patients and, at the same time, highlight the importance of multidisciplinary approach with the aim to obtain better therapeutic results and preserve the quality of life.

Conflict of interest

The authors declare no conflicts of interest.

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