Reviewer’s report

Title: Molecular analysis of hepatitis B virus (HBV) in an HIV co-infected patient with reactivation of occult HBV infection following discontinuation of lamivudine-including antiretroviral therapy.

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Reviewer: Giovanni B Gaeta

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Molecular analysis of hepatitis B…. by Costantini et al.

The Authors present a case of reactivation of occult HBV infection in an individual with HIV infection exposed to lamivudine containing anti-HIV regimens. HBV sequencing analysis was performed in two isolates collected at 9 year interval and showed an evolution of HBV genome.

I believe that the case is interesting and merit to be published, although cloning analysis or liver tissue analysis would have added strength to the study.

I have some points to be addressed:

1. Background: the statement that OBI is more prevalent in HIV infected persons than in “non coinfected” is weak; moreover, prevalences are influenced by the epidemiological background of HBV in different geographical areas. The phrase should be reformulated, quoting that anti-HBc / OBI prevalence in HIV infected persons is in the same range than in other blood or sexual transmitted diseases, as hepatitis C. Ref 1: Raimondo et al, J Hepatol 2008; 49:652-657 seems more appropriate.

2. Page 8, last lines: a severe reactivation of hepatitis B requires a competent immune system. For instance, is what happens during immune reconstitution in the absence of anti-HBV active drugs. Thus is not surprising that an hepatitis flare was not observed during the previous viral reactivation, when the patient immune system was deeply impaired. Please, modify accordingly.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests'