LETTER TO THE EDITORS

Safety of hepatitis C virus (HCV)-treated donors for kidney transplantation excluding occult HCV infection through kidney biopsies

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Dear Editors,

In 2011, the first direct acting antiviral (DAA) agent was approved for HCV treatment, with high rates of sustained viral response (SVR) [1]. Absence of RNA-HCV viral load 12 weeks after the end of treatment is considered as permanent viral eradication. However, anti-HCV could remain positive despite successful antiviral therapy [2]. Moreover, HCV can infect extrahepatic tissues, including kidney. The infected extrahepatic tissues might play a role in both HCV persistence and reactivation of infection [3]. Spain has been a pioneer European country in implementing a universal health policy including DAA for HVC patients increasing the number of patients with HCV infection considered cured [4]. There are cases reported of kidney transplantation from HCV-positive donor into an anti-HCV-negative recipient [5–7]. However, little is described about occult HCV infection. Occult infection is defined as the detection of HCV-RNA in liver tissue or peripheral mononuclear cells despite undetectable levels of HCV-RNA in serum [8]. Although this definition is not for organ transplantation, it has been considered that HCV transmission cannot be excluded without having assessed the presence of HCV-RNA in the graft. We report three cases of negative anti-HCV kidney recipients transplanted from two donors previously treated and cured for HCV infection one with normal liver function after treatment with PEG/RBV and the other with chronic liver cirrhosis stage Child B, treated with DAA agent's therapy. Anti-HCV and serum HCV-RNA were performed in all kidney recipients at 3, 6, and 12 months after transplantation. Recipients remained with persistent negative anti-HCV and negative blood RNA-HCV viral load after grafting. To exclude occult infection, a HCV-RNA tissue test was performed in kidney protocol biopsy samples within 6 months after transplantation. Absence of occult HCV infection was confirmed with a negative RNA-HCV test in all recipients(COBAS® AmpliPrep/COBAS® TaqMan® HCV Test, v2.0; limit of detection : 15 IU/ml). The efficacy of HCV treatments expand the possibility to use previously infected HCV donors, treated, and cured in any stage of the disease, as suitable donors for HCV-negative recipient.

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Conflicts of interest

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