Letter to the Editor

New aspects in epidemiological surveillance in relation to viral diseases in haemodialysis☆

Nuevos aspectos en la vigilancia epidemiológica en relación a las enfermedades virales en hemodiálisis

Dear Editor,

Interferon (IFN)-based HCV treatments have been progressively replaced by direct-acting antivirals (DAAs). Cases of confirmed hepatitis B virus (HBV) infection reactivation have been identified in patients who were receiving DAAs for the treatment of HCV. Several authors have recently drawn attention to this, although the literature on haemodialysis patients is scant. Collins et al.[1] report two cases of HBV reactivation coinciding with treatment with sofosbuvir and simeprevir for hepatitis C. De Monte et al.[2] published one case of HBV reactivation in a patient on treatment for HCV genotype 4 with ledispavir and sofosbuvir co-infected with HIV. Wahle et al.[3] report the evolution of HBV viraemia in 10 patients on haemodialysis co-infected with HBV/HCV following treatment with IFN-alpha for HCV. They observed reactivation in 60% of the cases (6/10), without loss of HBsAg during follow-up following treatment with lamivudine; in one of the cases in which the HBV was reactivated there was no sustained viral response in the treatment of the HCV. These authors warn of this phenomenon, emphasising that viral load should be determined in order to begin early treatment as they are kidney transplant candidates.

The Food and Drug Administration warns of HBV reactivation in co-infected subjects treated with DAAs.[4] According to the published cases, HBV reactivation occurred within 4–8 weeks of the beginning of the HCV treatment. DAAs do not cause immunosuppression, although HBV reactivation may be the outcome of the carrier's immune response in the infection environment with two hepatotropic viruses. This is supported by the fact that it is independent of genotype and treatment.[4]

In an interesting meta-analysis involving 39 studies, Jiang et al.[5] analyse the risk of HBV and hepatitis B reactivation in patients who received DAA-based treatment and in those treated with an IFN-based regimen. The reactivation rate was 21.1% in HBsAg-positive patients who received DAAs and 11.9% in those receiving IFN. The incidence of hepatitis was less in HBsAg-positive patients with non-detectable HBV DNA compared to patients with detectable DNA who received treatment with DAAs. The HBV reactivation rate in previously infected HBsAg-negative and HBcAb-positive patients was 0.6% for those who received DAAs and 0% for those who received IFN, none of whom presented an outbreak of hepatitis in relation to the reactivation of the virus. Preventive anti-HBV treatment significantly reduced the potential risk of HBV reactivation in HBsAg-positive subjects treated with DAAs. They conclude that the reactivation and hepatitis rate is greater in HBsAg-positive subjects that receive DAAs than in those who receive IFN, although these events are much less frequent in patients with a resolved infection (HBsAg-negative patients with HBcAb-positive). The authors advocate the importance of preventive treatment to avoid reactivation.

Mücke et al.[6] investigate the risk of HBV reactivation over one year of follow-up in patients with resolved HBV treated for hepatitis C. One hundred and eight (108) subjects presented no replication or seroconversion of the HBsAg, and they conclude that the clinical relevance of hepatitis related to past HBV infection after treatment with DAAs may have a very low prevalence. Similarly, in a recent meta-analysis, Mücke et al. warn of virus reactivation in co-infected patients. However, they show that the cases with resolved HBV infection present a low risk.[7]

This fact has not been clarified; the rapid suppression of viral load of HCV with DAAs could favour the replication of the HBV[8] and it is even asserted that IFN exercises an antiviral action on HBV.[9]

According to the recommendations of the European Association for the Study of the Liver, it is essential to determine HBV serological status before initiating the treatment of HCV, and in patients with HCV-HBV co-infection, treatment of HBV with nucleoside analogues should be initiated concomitantly with the anti-HCV treatment in accordance with the clinical guidelines.[10] If the HBsAg is positive, then specific HBV prophylaxis should be continued at least until 12 weeks after the end of the DAA treatment. If the HBsAg is negative but the HBcAb is positive, the HBV DNA and HBsAg should be monitored and anti-HBV treatment initiated if HBsAg or HBV DNA are detected.[10]

DOI of original article:
https://doi.org/10.1016/j.nefro.2019.09.009.

☆ Please cite this article as: Cancho Castellano B, Ruiz-Calero Cendrero RM, Martín Hidalgo-Barquero MV, Díaz Campillejo R, López Arnaldo C, Robles Pérez-Monteoliva NR. Nuevos aspectos en la vigilancia epidemiológica con relación a las enfermedades virales en hemodiálisis. Nefrologia. 2020;40:570–571.

The purpose of this letter is to attract the nephrology community's attention for the purpose of insisting upon the serological control of hepatitis virus infection markers, alerting to one of the possible causes of HBV reactivation which, while it seems to have a low prevalence, impacts the patient and the potential risk of contagion in haemodialysis units.

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https://doi.org/10.1016/j.nefroe.2019.09.006

Letter to the Editor

Persistent acute renal failure in a patient infected with *Plasmodium malariae*: the importance of renal biopsy☆

Fracaso renal agudo anúrico persistente en paciente infectado con *Plasmodium malariae*: la importancia de la biopsia renal

Dear Editor:

The pathogenesis of acute renal lesion in patients with malaria is not very well known, with endothelial damage and microvascular obstruction by the infected erythrocyte being suspected.[1,2]

Acute renal failure is quite common, and transient treatment with haemodialysis may be necessary. Generally

DOI of original article:
https://doi.org/10.1016/j.nefro.2019.10.002.
☆ Please cite this article as: Alexandru S, Arduan AO, Picasso ML, Suarez LG-P, Saíco SEP, Sánchez MSP, et al. Fracaso renal agudo anúrico persistente en paciente infectado con *Plasmodium malariae*: la importancia de la biopsia renal. Nefrologia. 2020;40:571–573.