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Challenges in the management of chronic hepatitis E in immunocompromised patients: reactivation after treatment with ribavirin

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Keywords: chronic hepatitis E, ribavirin, immunocompromised.

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Dear Editor,

Hepatitis E virus (HEV) is a common cause of acute liver injury worldwide. This infection can progress to chronic hepatitis and cirrhosis in immunocompromised patients.

Clinical case:

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A 71-year-old man with a history of stage IV-A follicular non-Hodgkin lymphoma in 2015, treated with R-bendamustine, rituximab, and obinutuzumab, achieving complete remission in 2021. He was admitted in March 2023 with weight loss, fever, and ascites. He denied alcohol consumption or the use of new medications. Laboratory tests showed liver enzyme alterations dating back to at least October 2020, with a predominantly cytolytic pattern. Upon admission, his liver function had worsened with thrombocytopenia, coagulopathy, and hypoalbuminemia. Imaging studies showed signs of portal hypertension (ascites and splenomegaly), but the liver was morphologically normal. A portal hemodynamic study and a transjugular liver biopsy were performed, demonstrating a portal hypertension gradient and a histology compatible with cirrhosis of probable viral origin. The etiological study of liver disease revealed severe hypogammaglobulinemia secondary to the treatment of his hematological disease and a positive HEV viral load in plasma, with negative HEV IgM. Ribavirin 1000 mg/day was started, adjusted to 800 mg/day due to anemia, completing 12 weeks with undetectable viral load. In September 2023, new transaminases alterations and positive HEV viral load were detected, reinitiating ribavirin 800 mg/day for 24 weeks, after confirming a negative viral load in plasma and stool. In July 2024, a new reactivation occurred, and another empirical 24-week cycle of ribavirin was started (*given the absence of specific recommendations in EASL guidelines for immunocompromised patients who are not solid organ transplant recipients*), finishing again with negative viral load. Since June 2024, he has also been receiving periodic infusions of intravenous immunoglobulin from the Hematology Department.

Discussion:

Chronic HEV infection is a significant cause of morbidity and mortality in immunocompromised patients, with rapid progression to advanced fibrosis. It is recommended to rule out HEV infection in patients with persistent transaminase alterations or chronic liver disease of unknown cause[1,2]. The treatment of the infection involves a challenge due to the lack of validated therapeutic options, also limited by potential side effects and the risk of viral reactivation after stopping treatment[3].

Options such as pegylated interferon alpha in non-decompensated patients or treatment with sofosbuvir with or without ribavirin could be considered, although there are limited data available in this scenario[4,5].

Bibliographic references

1. European Association for the Study of the Liver. EASL Clinical Practice Guidelines on hepatitis E virus infection. J Hepatol. 2018; 68:1256-1271.
2. Aslan AT, Balaban HY. Hepatitis E virus: Epidemiology, diagnosis, clinical manifestations, and treatment. World J Gastroenterol. 2020; 26:5543-5560.
3. Kogias D, Gavriilidis E, Antoniadou C, et al. Hepatitis E Infection in Immunocompromised Patients Previously Treated with Rituximab. J Viral Hepat. 2025;32.
4. Gallacher J, Taha Y, da Silva Filipe A, et al. Ledipasvir/sofosbuvir and ribavirin for the treatment of ribavirin-refractory persistent hepatitis E virus infection. IDCases. 2023;32.
5. Kamar N, Del Bello A, Abravanel F, et al. Unmet Needs for the Treatment of Chronic Hepatitis E Virus Infection in Immunocompromised Patients. Viruses. 2022; 14:2116.