

Poster Abstract P9

Hepatitis B virus infection and extra-hepatic manifestations: a systemic disease

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Background

People living with hepatitis B virus (HBV) chronic infection are exposed to high rates of liver complications including end-stage liver disease and hepato-cellular carcinoma. Extrahepatic manifestations of HBV infection have long been under-estimated.

Methods

“Search strategy and selection criteria”. For this review, we used the search terms « HBV, chronic hepatitis B, extra-hepatic manifestations, PAN, vasculitis, cryoglobulinemia, arthritis, kidney, GN, cardiac manifestations, cutaneous manifestations, lymphoma, asthenia, quality of life, ischemic heart disease, stroke», to search PubMed, Ovid MEDLINE, the Cochrane Central Register of Controlled Trials, and Web of Science for articles published in English from January 1, 2009, to January 1, 2021. Conference proceedings, abstract books, and references from relevant studies were also examined.

Results

Several of these extrahepatic syndromes have been well described, including systemic vasculitides, glomerulonephritis, and cutaneous manifestations. Other manifestations have been more recently described such as hematological malignancies and neurological diseases. These extra-hepatic manifestations are associated with significant morbidity and mortality. Although not completely understood, underlying mechanisms include HBV-induced local and systemic inflammation. The crucial pathogenic mechanism in most extra-hepatic manifestations is believed to be driven by immune responses against HBV, with the deposition of immune complexes (IC) in targeted tissues and a generalized inflammation. Several guidelines have been published for the management of patients with HBV infection. There is hope for a HBV cure increasing the number of candidates for therapy, beyond the present guidelines. An awareness and recognition of these manifestations are important to allow early diagnosis and treatment. Suppression of HBV replication usually improves extra-hepatic manifestations. This review will discuss how HBV induces inflammation and the associated systemic extra-hepatic manifestations of HBV infection to guide clinical management.

Conclusions

Clinicians should be aware that HBV-infected patients may present many extra-hepatic manifestations. Patients with HBV infection require checking for extra-hepatic manifestations and conversely patients with a rare systemic disease should be tested for markers of HBV infection. Suppression of HBV replication usually improves extra-hepatic manifestations. Most HBV infected patients with symptomatic extrahepatic manifestations and/or organ damage should probably receive antivirals regardless of viral and/or liver indications. We need more information, whether we should consider fatigue or decreased quality of life as an indication for treatment.