Impact of therapy on the outcome of chronic hepatitis B

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Abstract

Chronic hepatitis B virus (HBV) infection is a dynamic state in which HBV replication is the key driving force of disease progression, resulting in the development of hepatic decompensation, cirrhosis ad hepatocellular carcinoma (HCC). The primary aim of therapy is to eliminate or suppress HBV to reduce the activity of hepatitis thus reducing the risk of or slowing the progression of liver disease. Treatment with nucleos(t)ide analogues (NUC) may result in rapid suppression of HBV replication with normalization of serum transaminases and restore liver function thus increasing survival in patients with hepatic decompensation. The long-term benefits of a finite course of interferon alpha (IFN) therapy include a sustained and cumulative response, as well as a reduction in the progression of fibrosis and in the development of cirrhosis and/or HCC. Long-term NUC therapy may also result in histological improvement or reversal of advanced fibrosis and reduction in disease progression including the development of HCC. Hepatitis B surface antigen (HBsAg) seroclearance, a status close to a ��cure��, may also occur in patients with a sustained or maintained vial response, especially in those with IFN-based therapy. Pegylated IFN (PEG-IFN) and newer NUCs may have even better long-term outcomes because of improved efficacy and/or a low risk of drug resistance. However, treatment outcomes are still far from satisfactory. The development of more effective and safe but affordable anti-HBV agents/strategies is needed to further improve outcomes.