Achieving the Goal of Hepatitis B Treatment

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The goal of hepatitis B treatment is to prevent the development of cirrhosis, liver failure, and hepatocellular carcinoma (HCC). Treatment with nucleos(t)ide analogue (NUC) reduces mortality and prevents HCC to some degree in patients with chronic hepatitis B (CHB). However, many patients in Asian-Pacific region have developed multiple drug-resistances,[1] which compromises the initial benefit of NUC treatment.[2,3] We conducted several randomized trials to identify the optimal treatment strategy for patients with multiple drug-resistant CHB patients,[4-6] and suggested that monotherapy with tenofovir disoproxil fumarate (TDF) may lead to high rates of virological response in most of these cases. However, even after achieving virologic response, the relapse rate of hepatitis is high after treatment discontinuation regardless of the HBeAg seroconversion.[7] In this regard, we identified that HBsAg seroclearance is an optimal endpoint for NUC-treatment discontinuation, because it was associated with favorable clinical outcomes and was durable in most patients.[8] Entecavir and TDF are the most potent drugs in terms of suppressing HBV replication with a minimal risk of resistance. However, whether these two drugs reduce the risk of death or HCC to a greater extent than lamivudine has been unknown. We showed that entecavir therapy was associated with a significantly lower risk of death than lamivudine.[9] However, the drugs did not differ on HCC risk. In conclusion, current treatments for CHB are potent in suppressing the HBV replication, but far from cure of the disease. Further efforts are required to develop treatments that can lead to the complete eradication of HBV.