

Abstract

Lamivudine, a nucleoside analogue, is a licensed oral antiviral drug for hepatitis B virus (HBV) and approved by National Institute of Health, ROC. However, biochemical and virological relapse frequently appears after discontinuation of the treatment for hepatitis B e antigen (HBeAg)-positive and ?HHVnegative patients. Up to date, the optimal treatment duration of lamivudine for chronic hepatitis B is still controversial. Newly reported studies suggest an additional lamivudine treatment for more than one-year has the benefit for sustained HBV inhibition, serum alanine transaminase (ALT) normalization, and increment of HBeAg sero-conversion rate. On the contrary, long-term lamivudine treatment can select drug-resistant HBV mutant. The lamivudine-resistant HBV frequently happened in the polymerase gene of HBV, so called YMDD mutation. Clinically, YMDD-mutant HBV can result in disease flare up and acute exacerbation. Consequently, there is no consensus for the optimal treatment duration of lamivudine for chronic hepatitis B. Nowadays, HBeAg-positive chronic hepatitis B patients who have abnormal ALT level for more than 5 times of upper limit of normal (ULN) can receive lamivudine treatment for twelve to eighteen months by insurance pay according to the announcement by Bureau of National Health Insurance. However, the e sero-conversion rate after twelve month of lamivudine treatment is only 50% for those patients. Relapse may happen in the other half of patients after a 12-month lamivudine treatment. On the other hand, YMDD HBV mutant can be selected after an 18-month lamivudine treatment. That HBV mutant might result in acute exacerbation of hepatitis. In clinical practice, some patients may ask for continue lamivudine treatment after an 18-month lamivudine treatment if the end-point (HBe seroconversion) is not achieved. In this study, we will compare three different durations of lamivudine treatment (12-month, 18-month and extension treatment) on the clinical response, breakthrough and relapse for HBeAg-positive chronic hepatitis B patients. In addition, HBV viral load, genotypes, and YMDD mutant will be studied to delineate their roles in the lamivudine treatment for those patients.

From this June to December we collected 89 patients, in the beginning of 3TC treatment, their sera of HBV DNA will be quantitated. This project takes three years to observe, it is a pity that we have to pause the project in six months.

Keywords : chronic hepatitis B ; Lamivudine ; YMDD mutation ; relapse