中文題目：干擾素合併雷巴威靈治療於 B 型和 C 型肝炎雙重感染患者後發生 B 型肝炎活化

英文題目：Hepatitis B reactivation after pegylated interferon plus ribavirin in chronic HBV/HCV-coinfected patient

作　　者：朱能生[1] 戴嘉言[1.2] 余明隆[1.2]

服務單位：高雄醫學大學附設中和紀念醫院 [1]內科部 [2]肝膽胰內科

Introduction

Pegylated interferon (PegIFN)/ribavirin combination therapy remains the standard of care for chronic hepatitis C (CHC) in areas where new direct antiviral agents (DAAs) are not available such as Taiwan. PegIFN and nucleos(t)ides analogues (NAs) has been advocated as a first-line therapy in patients with chronic hepatitis B (CHB). Patients with chronic hepatitis C virus (HCV) and B virus (HBV) coinfection can be treated with PegIFN/ribavirin for CHC. Serum HBV DNA may appear in patients with undetectable pretreatment levels of HBV DNA before treatment. Since reactivation of hepatitis B in patient with inactive CHB, either spontaneously or under some clinical condition such as with immunosuppressive therapy or organ transplantation, can occur after the increase in serum HBV level. The hepatitis B reactivation has been considered as a condition which needs to be care.

Case Presentation

This 53-year-old female patient visited our OPD due to seeking for therapy for her chronic hepatitis B and C diagnosed for years. She was an active CHC patient with positive serum HCV RNA as well as an inactive CHB carrier with negative serum HBV DNA. Her baseline laboratory findings showed positive HBs Ag, anti-HBe, anti-HCV and HCV RNA (PCR)(690,312 IU/mL) with HCV genotype: 1b and negative HBeAg and HBV DNA (PCR) were noted. Her baseline liver function test showed total bilirubin:1.5 mg/dL and AST/ALT:35/45 IU/L. Abdominal sonography showed chronic liver disease without cirrhosis. IL28B 8099917 genotype: TT (favorable) was also noted. After PegIFN/ribavirin therapy for 24 weeks with the reimbursement of national health insurance, she got rapid, early and end-of-treatment virological response. The serum HCV RNA, HBV DNA levels and HBeAg are negative during the period of PegIFN/ribavirin therapy. However, after cessation of PegIFN/ribavirin therapy, she suffered from reactivation of HBV (HBV DNA: 67,790 IU/mL) at 1st month and flare of ALT (2116 IU/L) with jaundice (bilirubin: 2.54 mg/dL) at 3rd month and got admission thereafter. Telbivudine (600mg/day) was given with the peak INR up to 1.18 (on 5th day) and peak bilirubin up to 3.56 mg/dL (on 8th day) than became normal at 1st month after telbivudine therapy. Persisted negative for HBV DNA, HBeAg and HCV RNA were also noted after telbivudine therapy. The ALT and bilirubin levels remained within normal range with continuing therapy for more than 5 years NA therapy till now, with switching of telbivudine to lamivudine (100 mg/day) since18 months ago.

Discussion

HBV/HCV co-infection is prevalent in areas where HBV is endemic, such as South-East Asia. The prevalence of HBV–HCV dual infection in Taiwen about 0.26–2.4%.In the patients with inactive HBV-coinfection, PegIFN/ribavirin combination therapy is effective for clearance of HCV. Nucleos(t)ides analogues (NAs) therapy is effective for reactivation of hepatitis B after PegIFN/ribavirin therapy and seems to have no impact on cleared HCV. Closed monitoring of liver function and HBV DNA are mandatory after pegylated interferon plus ribavirin in chronic HBV/HCV coinfected patient. In the previous randomized clinical trial in Taiwen, no clinical flare was noted till six months after cessation of PegIFN/ribavirin combination therapy for active CHC patients with negative HbeAg and HBV DNA (By PCR).This report is the first case reported to have HBV flare as early as three months after cessation of PegIFN/ribavirin combination therapy for these cases with active CHC patients and inactive CHB.We recommended that in these circumstances, we have to follow up patients more closely to pay attention to the severe clinical chronic hepatitis B (CHB) flare .In patient with dual infection treated with PegIFN/ribavirin for chronic hepatitis C (CHC) even the chronic hepatitis B (CHB) is inactive.