Sir,
We report the effect of sequential Pegylated-Interferon-alpha-2a (Peg-INF-alfa-2a)/telbivudine treatment in a patient affected by a severe Hepatitis B e Antigen (HBeAg) negative chronic Hepatitis B Virus (HBV) infection treated at our facility. We discuss the rationale of this innovative therapeutic strategy for the prolonged/long life treatment of severe chronic hepatitis B (CHB).

A 63-year-old man with a 22 years history of CHB presented at our center for HBV infection evaluation. He was affected by a clinically documented severe CHB infection, confirmed also by Fibroscan® (fibroscan stiffness Kp 13). The patient was HBeAg negative, HBV deoxyribonucleotide (DNA) positive (basal HBV DNA levels 2,700,000 IU/mL by real time polymerase chain reaction (rt‑pcr)), serum alanine aminotransferase (ALT) levels 140 IU/L (upper normal limit, UNL 41 IU/L), functional class on admission Child-Pugh score was A5 without portal hypertension, negative for anti-Hepatitis delta virus (HDV) and anti-Hepatitis C virus (HCV) antibodies.

At the basal screening, several possible causes of liver diseases including, autoimmune, thesaurismosic and metabolic origin were excluded.

On February 23rd 2007, patient began antiviral therapy with Peg-INF-alfa-2a (180 μg weekly subcutaneously) with a satisfactory virologic suppression at week 4 (HBV DNA 159,000 IU/mL; ALT 339 IU/L) and week 12 (HBV DNA levels <30 IU/mL, ALT 65 IU/L). At follow-up, 48 weeks after beginning of Peg-INF-alfa-2a, blood tests documented a complete suppression of HBV DNA levels (<12 IU/mL) and a normalization in ALT plasma values (38 IU/L). Antiviral treatment ended on February 6th 2008.

At week 4 and 8 following treatment suspension, we recorded an increase in HBV DNA plasma levels (28,200 IU/mL) with normal ALT values [Figure 1]. After 12-week drug-free period, on May 6th 2008 we decided to start antiviral therapy for HBV reactivation using telbivudine 600 mg/day in oral therapy. A rapid virologic and biochemical response was observed after 4 weeks; specifically, HBV DNA was undetectable (<12 IU/mL) and ALT values were normal. No increase in plasma creatine phosphokinase (CPK) levels was observed [Figure 2].

At the 52nd week of telbivudine therapy, we recorded an increase in CPK levels. Anamnesis suggested CPK peak was related to an intense physical activity. After 3 days of muscular rest, CPK levels spontaneously returned to normal values as documented by a following medical checkup.

Currently, on March 2012 after 167 weeks from the beginning of telbivudine, blood tests show normal ALT and CPK plasma values, and HBV DNA remains undetectable (<12 UI/mL). Moreover, no adverse drug reactions associated with telbivudine treatment have been observed [Figure 2].

In conclusion, we report the effect of Peg-INF-alfa-2a/telbivudine sequential treatment in severe chronic HBV infection. To our knowledge, this is the first report on the efficacy of a sequential therapy including the administration of telbivudine as NA.

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