6 of 10 with VR were tested for gynotypic mutation. Among them, rtM204I was detected in one patient and rtM204I+rtL180M was detected in 5 patients. At the time of VR, 9 patients (90%) switched from CLV to the entecavir 1mg, and 1 patient (10%) to adefovir. CLV-related myopathy occurred in 12 patients (14.1%). The rates of myopathy at 1, 2, and 3 years were 3.7%, 21.8%, and 41.0%, respectively. Myalgia occurred in 7 (8.2%), upper limb and lower limb weakness occurred in 5 (5.9%). Myopathy symptom and sign were accompanied by muscle enzyme elevation in 9 of 12 patients. When CLV was stopped or changed to the other nucleos(t)ide analogues, myalgia and muscle weakness were improved in all cases.

Conclusions: 10 patients (12.9%) experienced viral breakthrough during therapy. The frequency of myopathy increased with each year of therapy, however, myopathy completely recovered after stopping or changing the medication.

Keyword: Chronic hepatitis B, Clevudine, Viral breakthrough, Myopathy

PE-011

Five years’ experience of Entecavir treatment in Korean chronic hepatitis B patients

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Background: Entecavir is one of the highly potent and commonly prescribed oral antiviral agent for treating chronic hepatitis B virus infection. Here, an experience in the use of Entecavir in Korean patients with chronic hepatitis B is reported.

Methods: Patients who have taken 0.5 mg/d of entecavir to control hepatitis B virus between January, 2006 to December, 2010 were retrospectively studied. The virologic response during the medication, and the DNA status after the cessation were observed.

Results: Among 1367 patients prescribed with entecavir, 128 patients discontinued the drug before December 31th, 2010. Of these 128 patients, HBeAg was positive in 63 (49.2%), negative in 47 (36.7%), and not identified in 18 (14.1%) patients. Among 111 patients whose DNA level was detected at least once after the first prescription, 87 (78.4%) patients showed undetectable levels of HBV DNA (< 300 copies/mL) on a median of 139 days, and underwent treatment for a median of 410 days. 48 patients were followed up after the end of treatment, and 38 (79.2%) patients showed relapse on a median of 128 days. In the 10 patients whose consolidation duration was under 365 days, the virologic relapse was at a median of 99 days and none of the patients showed sustained suppression of the viral DNA, while in 38 patients who underwent consolidation for at least one year, the virologic relapse was in 29 patients at a median of 134 days and 9 patients are showing sustained DNA suppression till now.

Conclusion: These data are compatible to previous reports on the good virologic responses of entecavir in chronic hepatitis B virus, and also may support the idea that the longer the consolidation treatment duration (at least one year) after undetectable levels of HBV DNA, the longer will the virologic response sustain.

Keyword: Chronic hepatitis B, Entecavir, Durability

PE-012

The analysis of early virologic response in combination treatment with pegylated interferon and nucleoside analogue in patients with chronic hepatitis B

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Background: For the treatment of chronic hepatitis B, a long-term use of oral nucleoside analogues have been mainly used. However, drug-resistant virus and the low response rate of interferon are problematic. Recently, the new clinical studies have reported, which oral antiviral agents is administered for lowering viral load and, then pegylated interferon treatment is followed, sequentially. In this study, we aimed to compare the treatment efficacy between pegylated interferon monotherapy and pegylated interferon, entecavir combination therapy in chronic hepatitis B.

Methods: All enrolled patients were 57, which divided into two groups, Group A (pegylated interferon alone, n=35) and Group B (pegylated interferon plus entecavir, n=22). In both group, pegylated interferon alpha-2a (pegasys, ROCHE) 180 mcg/wk was administered. In combination group, oral nucleoside analogue, Entercavir, was administered for 2-12 weeks. The results were analyzed by intention to treat population.

Result: Age, sex, AST/ALT, BMI, HBV DNA copies were no difference between two Groups. Total 11 patients were dropped out, 6 of whom were non-responders. Although EVR were statistically no difference, Group A (45%) and Group B (68.8%) (p=0.163), it seems to be higher in Group B. In 48 weeks, response rates were Group A (58.3%) and Group B (81.8%) (p=0.222), and HBV DNA negativity’s rates were Group A (25%) and Group B (27.3%) (p=0.635). In 34 patients, liver biopsy was performed before treatment. Although there were no significant factors to influence the virologic response, Inflammation score seems to be higher in EVR group.

Conclusion: Our data suggest that combination therapy of pegylated interferon and oral nucleoside analogues shows the tendency of raising EVR. Further study is needed for the evaluation of the factors associated EVR and SVR.

Keyword: Pegylated interferon, Entecavir, Chronic hepatitis B

PE-013

Entecavir and lamivudine in patients with decompensated chronic hepatitis B liver disease

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POSTER PRESENTATION (EXHIBITION)
The efficacy and safety of telbivudine switch therapy in HBeAg negative chronic hepatitis B patients treated with lamivudine

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Background: GLOBE study showed telbivudine was superior to lamivudine in both HBeAg positive and negative chronic hepatitis B patients (CHB). However, it is not sure whether telbivudine could be still superior to lamivudine when lamivudine is change to telbivudine in patients on lamivudine treatment. In this study, we have analyzed the results of telbivudine switch therapy in HBeAg-negative CHB patient on lamivudine treatment without virologic breakthrough.

Methods: Switch to 600 mg of telbivudine was performed to total 74 HBeAg-negative CHB patients on lamivudine treatment without virologic breakthrough. Virological and biochemical responses were assessed at 0, 12, 24 weeks, respectively. Undetectable HBV DNA was defined as serum HBV DNA less than 12 IU/mL by polymerase chain reactive (PCR) assay. Safety evaluations included discontinuation of telbivudine and analyses of adverse events.

Results: The mean age is 55 (30-77) and male is 68.9%. Mean duration of previous lamivudine treatment was 60±24 months. At the time of telbivudine switch, mean serum HBV DNA was 119±387 IU/mL and 73% had undetectable HBV DNA. Eighty percent of patient had HBeAb and 90.5% showed normal alanine aminotransferase (ALT). At 12, 24 weeks of telbivudine treatment, 81% and 86.8% showed undetectable HBV DNA, respectively. Reversion to positive HBeAg did not occur during 24 weeks of treatment in all patients. Normal ALT levels were achieved by 92.9%, 92.4% at 12 and 24 weeks. All patients completed the treatment duration of 24 weeks and there is no significant adverse events during prolonged therapy.

Conclusions: Telbivudine switch therapy was safe and effective achieving additional viral suppression in HBeAg-negative CHB patients who have been treated with lamivudine.

Keyword: Telbivudine, Lamivudine, Chronic hepatitis B

PE-014

The evolution of the clevudine resistant HBV during the rescue therapy

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Background: Clevudine-resistance is associated with rtM204I mutation, which leads to viral breakthrough during the continued treatment. However the evolution of the rtM204I and associated mutations during the rescue therapy has not been reported. The aim of this study is to investigate the evolutions of the clevudine-resistant HBV.

Methods: Five patients were found to have rtM204I mutation on RFMP assay during viral breakthrough at the baseline. Clonal analyses of the baseline and the serial sera from each of the patient were studied during the treatment with various salvage regimens. The results were compared with ultradeep pyrosequencing assay additionally.

Results: Patient-1 stopped all the antivirals. Baseline rtL80I and rtM204I mutants were gradually replaced by wild type sequences during the follow-up. Patient-2 switched to adefovir, and after 9 months, only 1 out of 15 clones of rtM204I were remained detectable and other clones showed wild-type sequences. In patient-3, entecavir was added to adefovir after 2 months of treatment with adefovir, and rtM204I mutant persisted in all clones. Patient-4 received adefovir and clevudine combination therapy, and showed rtL80I from 3 out of 6 clones and rtM204I from 4 out of 6 clones, and rtA181V has emerged in 1 out of 6 clones after six month of treatment. In patient-5, HBV DNA titer was not suppressed even after 1 year treatment with clevudine and adefovir combination therapy, retaining rtL80I, rtM204I, and rtL180M mutation in all clones. In addition, rtL164M, rtS50P, and rtH55R were noted. After six months of entecavir and adefovir combination therapy, those mutations except rtL80 I and rtM204I were disappeared and HBV DNA decreased below 2000 IU/mL.

Conclusions: Clevudine-resistant mutations evolved and were selected according to the type of salvage regimen. Especially, combination therapy led to selection of clevudine resistant