Reviewer's report

Title: Virologic and Clinical Characteristics of HBV Genotypes/Subgenotypes in 487 Chinese Pediatric Patients with CHB

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Reviewer: jian-wu yu

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Reviewer(s)' Comments to Author:

Major Compulsory Revisions

Zhong et al studied the virologic and clinical features of HBV genotypes/subgenotypes in pediatric patients. They found that HBV/C2 is the most predominant subgenotype in pediatric patients of Northern China. Pediatric patients with subgenotype C2 virus were more susceptible to have disease progression.

As not many studies to analyze relationship among the genotypes/sub genotypes and NA resistance as well as the disease progression in pediatric patients were reported, the results of this paper provided us some useful information in this special group. However, the following issues should be addressed.

1 Is this study a retrospective cohort study or prospective study? How did the study design? Please describe the inclusion and exclusion criteria. The NA should not be used until the age of the patients are above 16 years in China. Why there are too many pediatric patients used LAM or ADV? Did all of the patients sign the written informed consent?

2 NA are commonly used in clinic for suppressing viral replication to affect the progression of liver diseases caused by chronic HBV infection. There were two hundred and seventeen patients exposed to nucleos(t)ide analog(s) in this article. The authors should provide the information (treatment drug selection, therapeutic effects, drug-resistance). Theses index would affect the histopathology of the different sub-genotypes patients.

3 Among the 487 pediatric inpatients with CHB, 187 HBeAg positive patients who were submitted to liver biopsy. The mean degree of inflammation, stage of fibrosis and ALT level in HBV/C2 patients was significantly higher than HBV/B2 patients (P <0.05). But before drawing this conclusion, the factors (such as sex, age, routes of infection, therapeutic effects) affect the degree of inflammation, stage of fibrosis and ALT level of HBV/B2, C2 patients should be excluded. Multiple logistic regression analysis may be used to identify factors related to mean degree of inflammation of patients.

4 The paper should be read by a native English speaker.
Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.