Reviewer's report

Title: Prevalence of and the factors associated with diabetes mellitus in patients with chronic liver disease

Version: 1 Date: 30 July 2004

Reviewer: Teh-Ia I Huo

Reviewer’s report:

General

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

A total of 185 patients with chronic liver disease or cirrhosis were included to investigate the association between CLD and DM. Authors concluded that chronic hepatitis and cirrhosis may predispose to the development of DM. Although the results and conclusions were clinically sound, the conception of this paper is not very new. In addition, there are several flaws that may deserve authors’ attention.

1. A major shortcoming of this study is the number of studied patients was rather small. This defect made subgroup analysis less convincing, as there were only 41 patients with cirrhosis.

2. The inclusion criteria were not clear. The first group is inactive HBV carriers; the second group consisted of patients with HBV or HCV infection, and the third group was cirrhotic patients. These different characteristics made the whole population quite inhomogeneous. Authors should explain the way they enrolled patients.

3. In Table 2 and 4, p values should be given for all variables. Authors should make adequate explanation for this paradox.

4. It is quite surprising that patients with chronic hepatitis were at a higher risk of DM development compared to patients with cirrhosis (OR: 11.6 vs 6.5, Table 2). Most previous studies indicate a strong association between cirrhosis, but not necessarily chronic hepatitis, and DM. Authors should make adequate explanation for this paradox.

5. Although chronic hepatitis and cirrhosis may predispose to DM, DM per se has also been suggested to induce chronic hepatitis and cirrhosis through the stage of NASH. Thus a clear temporal relationship between the onset of hepatitis (or cirrhosis) and DM is very important, and authors should make additional comments on this limitation.

6. The definition of histological grading and staging should be given in Methods.

7. In Table 4, patients with histological staging 2-3 had a higher risk of DM development compared to patients with stage 4-6 (OR: 59.5 vs 11.9). However, if you look at Table 3, more patients with stage 4-6 had DM compared to other stages, suggesting patients with stage 4-6 should have the highest risk. Please clarify.

8. There are many typographical and grammatical errors throughout the manuscript. The use of English should be further improved.
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

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

Statistical review: No

Declaration of competing interests:

none