Reviewer's report

**Title:** Anthropometric, biochemical and clinical assessment of malnutrition in Malaysian patients with advanced cirrhosis

**Version:** 1  **Date:** 26 January 2010

**Reviewer:** Luisito O Llido

**Reviewer's report:**

- Major Compulsory Revisions

1. **INTRODUCTION:**
   a) The objective of determining malnutrition in Asian liver cirrhosis patients is an important goal, but using different tools for assessing nutritional status without previous validation muddles the outcome due to the different results. Most studies using several factors like SGA have come up with consistent assessment results due to their sticking to one validated tool. In this case combining SGA with anthropometric measurements like MAC or MAMC would be acceptable if these were designed to reinforce each other, but correlating them with different forms of cirrhosis and trying to determine significance appears to be in cross purposes.
   b) What is needed in the introduction is clearness in the problem presented and in the goals. Is the study aimed at showing a profile of nutritional status in this group of liver cirrhosis and to compare this with the other groups? (e.g. Asian versus western). Or is the study aimed at showing differences in nutritional patterns in the different types of liver cirrhosis patients? Or are all of the above questions the goal of this study? All these have to be clearly stated in the introduction.

2. **METHODS:**
   a) For clearness and flow, suggest to include inclusion or exclusion criteria within the description of patient recruitment.
   b) Please be clear in delineating the criteria of diagnosis for liver cirrhosis that is: enumerate the criteria first, then discuss each point.
   c) Please indicate how you arrived at the values of the MAMC (better still include the formula)

In the nutritional assessment section there is a need to separate the different nutritional assessment tools to determination of fat stores, muscle mass, and functional capacity in order to have a clear delineation of the levels of body composition values and effects. This is where there is also a need to qualify the use of SGA versus BMI since some studies have shown that SGA when compared with BMI came up with more malnourished patients (Norman K et al. The Subjective Global Assessment reliably identifies malnutrition-related muscle dysfunction. Clin Nutr 2005; 24(1): 143-50)
d) In the laboratory examinations the authors mentioned albumin and pre-albumin with the declaration that pre-albumin is better. The question is: why still use albumin in one of the tests? There is therefore need to further explain why albumin is included. There is also a need to explain further why correlation of albumin or pre-albumin with CRP is needed in this group of patients. Does the severity of the cirrhosis correlate with the results of these laboratory values?

3. RESULTS:

a) When reporting data comparison it is recommended that differences be quantified by statistical analysis thus when saying there is a difference, it means the statistical analysis was done and showed it. If there is none or no formal comparison using the mentioned statistical tools then mentioning such “differences” should be avoided. If there are differences it is also recommended to ALSO mention the p-value and the type of test used.

b) This is the case in point in the Nutritional assessment section where differences were noted and not backed by statistics (or did the authors failed to mention them in table #2?). The same comment also applies in “clinical severity and nutritional parameters”. The last section details the data comparing alcoholic versus non-alcoholic cirrhosis also makes comparisons with no significance. Suggest to reorganize and reformat the data presentation.

4. DISCUSSION:

a) Discussion on the differences of value from other groups (Asians and Caucasians) were mentioned, however there is a need to organize the discussion flow to the following areas:
   i. Malnutrition incidence in the different types of cirrhosis
   ii. Prevalence or percentage of malnutrition compared with other studies
   iii. Nutritional assessment tools

b) Did the etiologies have a role in the severity of the malnutrition? The authors discussed alcoholic versus non-alcoholic data – can they explain the differences? Why was this entity given much attention?

c) Mentioning CRP here without presenting data – is there data?

c) Correlating degree of malnutrition with severity of liver cirrhosis needs some statistical analyses which need to be shown in the results and in the discussion.

5. CONCLUSIONS: Please conclude only on data/information that were examined and analysed. There is also need to be more specific in the conclusion(s). Intake was mentioned but not dealt with in the results and discussion.

6. TABLES

a) Table 1: Please modify the table to fit the following suggestions:
   1. In the table title: suggest to change the title to something like “Patient Profile”
2. In the etiology, suggest to qualify the severity of liver cirrhosis with the type of cirrhosis

c) Table 2: Please modify the table as follows:
1. Suggest to quantify the different based on the SGA status (2 columns) then placing the normal values in the third column.
2. What does kgF mean?

d) Table 4: Suggest to remove this in as much as it focuses on the etiology due to alcohol and the values are not significant. Place the values/results instead in the Results section.

- Minor Essential Revisions

Grammar corrections are needed and please remove comments that are not formal English like: “commonest” instead of most common.

1. Some statistical tests were mentioned in the discussion or results which were not included in the methodology.

2. Table 3: please indicate the type of statistical analysis used in the comparison together with the notation whether the result is significant or not.

- Discretionary Revisions: none

**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.

**Declaration of competing interests:**

I declare that I have no competing interest(s).