Peer Review File

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<mark>Reviewer A</mark>

the authors are reporting on their 18 patients meeting a standardized NIAAA definition of AH who underwent LT over 27 months. they found that cirrhosis was noted in 3/4 of the explants despite clear inclusion of AH patients.

the authors did a good job of defining the cohort but I would like to know a few additional things

1. include any information on the amount of alcohol these patients were consuming. (the definition requires "heavy" drinking (more than 50 grams a day). elsewhere you refer to "excessive alcohol consumption". please use consistent language.

2. any information on the length of alcohol use?

3. can you report on prior relapses or times of sobriety

4. any past alcohol treatment?

5. if you have this data on alcohol use could you construct a HRAR or high risk alcohol relapse score?

6.89% of your patients had one prior hepatic decompensation? please clarify

also despite the NIAAA use of the term "alcoholic hepatitis" we should be now standardizing the language to severe alcohol-associated hepatitis

Response:

- "Heavy" was changed to "excessive" for consistency (changes in text: line
 61). The amount of alcohol considered "excessive" varies per patient.
 Therefore, if the clinical diagnosis of severe alcohol associated hepatitis was met, drinking was deemed "excessive" and treated as a categorical variable.
- No information on length of alcohol use was provided given that this was defined as a categorical variable (see above).
- Prior relapses, times of sobriety, and past alcohol treatment is beyond the scope of this paper as this paper focuses on the explant pathological findings on explant and is not meant to prognosticate relapse
- The definition of "one prior hepatic decompensation" is delineated in line 128-130.
- The terminology in the document was reviewed and changed to severe alcohol-associated hepatitis for consistency, including the title.

<mark>Reviewer B</mark>

The authors report on a small cohort of 18 patients at a single centre who received

early LT for AH. The aim of the study was to describe liver pathology of explants, and the results demonstrate underlying cirrhosis in a majority and inconstant features of alcoholic steatohepatitis.

Major comments:

The prevalence of underlying chronic liver disease (ie cirrhosis) in this situation has already been reported in previous studies.

The description of pathological findings should be presented in a table. In addition to classical features (ballooning, etc..) additional findings would be useful (microvesicular steatosis, megamitochondriae, iron deposits, pattern of fibrosis, etc..). A suggestion would be to present pathological data of explants according to the duration of reported sobriety (ie: <30 days vs more than 30 days) Information lacking: how many patients received steroids before LT?

Response:

- Table 6 presents the pathological findings of the explants.
- Pathological data of explants according to the duration of sobriety would be an excellent inclusion for further study and the next paper.
- None of the patient received steroids before LT because the mean MELD of the cohort was 40 and the mean Cr was 2.6, therefore clinically ineligible for steroid treatment per the STOP-AH trial

<mark>Reviewer C</mark>

Nice paper. Please correct typo in line 107. Sentence spanning lines 104/105 needs attention

Response:

- Typo in line 107 corrected (changes in text: "rFesolved" changed to "resolved")
- Sentence spanning lines 104-105 reviewed and edited for clarity. Changes in text: Prior read "Hepatology assessed for severity of AH including indication for and likelihood of response to steroid therapy." Now reads "Hepatology assessed for clinical severity of AH, including indication for, and likelihood of response to, steroid therapy."

Post-revision Comments:

Here are the itemized responses to your comments regarding manuscript DMR-22-41R2.

1. having the information about amount of alcohol use is important and should be available for such a small cohort. The amount of alcohol use is critical to the pathology of alcohol-associated liver disease. If you don't have it, please add a line to the limitations because the variability of presentation may be directly connected to this missing variable.

This was added to the limitations section (line 231).

2. On line 128 you should be clear if 89% of your cohort had at least one "prior" manifestation of decompensation. The way it was written makes me think you are including signs of cirrhosis at the current admission.

This detail was clarified in line 178.

3. Language for "alcohol-associated hepatitis" should be consistent (see abstract and line 212, please go through the entire document and be consistent

Language for AH was checked and is consistent throughout document.

4. In addition to calling for a revision in "terminology" the discussion could also call for a better definition of AH.

This was added to the discussion section (line 221).