Reviewer’s report

Title: Role of enteral nutrition in nonthyroidal illness syndrome: a retrospective observational study

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Reviewer: Angela Leung

Reviewer's report:

This is a retrospective chart review of 80 consecutive patients with nonthyroidal illness and enterocutaneous fistulas between 2013-2014 in China. The authors attempt to study the relationships between initiation of enteral nutrition (including the time from hospital admission) and resolution of nonthyroidal illness as measured by serum thyroid function tests. It is an interesting proposal to examine if this intervention may improve the course of nonthyroidal illness, and thus morbidity and mortality in an ICU setting. However, there are some significant limitations related to the design of the study that limit the rigor of the paper.

MAJOR

1. The various subgroups could be better clarified. It appears that there are two exposure groups: those with early enteral nutrition vs those with late enteral nutrition. Then there appears to be a single outcome (resolution of nonthyroidal illness), which is used to categorize subjects into those with the outcome vs those without the outcome. If this is the case, consider assessing the proportions of these four groups with a Chi-square statistical test instead. as the data for Table 2 are quite confusing and lack any statistical interpretation.

2. Why was 2 weeks chosen as the threshold timepoint for the initiation of enteral nutrition to result in the two groups. This timepoint appears arbitrary and seems to be chosen after the study was completed, rather than a priori. The authors' previous study (reference #10) is cited, but that timepoint is also not clearly rationalized.

3. Table 2: If Group A are those which recovered from their nonthyroidal illness, while Group B are those that did not, it is unclear what the differences in their serum TFTs are from these data. The TFTs look very similar. It may be more clear to redefine what you consider "recovery of nonthyroidal illness".

MINOR

1. Patients and study design: The reasons for excluding those with these specific major comorbidities is unclear.

2. Results: Suggest clarifying that the TFT changes are expressed in mean +/- SD.
3. Table 1: Usually only the baseline characteristics are shown, thus it is strange to see those for Groups A and B also shown here. Those data would be better in a separate table.

4. Table 2: Suggest re-presenting these data as a line graph.

5. Table 4 and Figure 1 can be deleted as they are irrelevant or already stated in the text.

6. There are extensive English syntax and grammar problems throughout. Significant revisions are needed.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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Not suitable for publication unless extensively edited

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