Reviewer’s report

Title: Association of body mass index with amnestic and non-amnestic mild cognitive impairment risk in elderly

Version: 0 Date: 17 May 2017

Reviewer: Yong Xu

Reviewer's report:

The study is a retrospective study focusing on the relationship between body mass index and mild cognitive impairment risk in elderly people. There is need for clarification of a few points and the relevance of the findings needs to be discussed more carefully.

1. This is a retrospective study that the baseline is defined as 6 years ago. How dose this baseline defined? Is there any common view on it? The authors should provide more details about the protocol.

2. Were the patients under some treatment? The possibility that the results may be related to treatment should be mentioned and, especially some medicine can have effect on the BMI. If possible, the author should do some analysis to exclude the effect of treatment as confounding variable?

3. The statistical methods includes t-test, ANOVA, chi-square test and multivariable logistic regression analysis, and there are many comparisons among different level of weight and the subjects (naMCI, aMCI and controls). Has the author done multiple correction on the statistics? Pay attention to Table 1-5.

4. The level of education has definite effect on the cognitive function, so the author should describe this characteristics of the subjects in this study. If possible, the author should do some analysis to exclude the effect of education as confounding variable?

5. The subjects enrolled 240 naMCI, 240 aMCI and 400 controls. How does the sample size calculate? What's the power of it?

6. I suggest to tone down the significance of the claim and the comparison with the current methods: In particular, I think there are a few points that merit further discussion and possibly further input from the literature.

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.

Yes

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

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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