Reviewer’s report

Title: Relationship between inflammatory markers and mild cognitive impairment in Chinese patients with type 2 diabetes: a case-control study

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Reviewer: Hiroshi Akasaka

Reviewer's report:

The authors conducted a case-control study of 63 MCI cases and 63 matched controls in patients with type 2 diabetes at the Metabolic Disease Hospital and examined the relationship between inflammatory markers and MCI. The independent relationship between serum IL-6 level and MCI, and the phenomenon that serum folate level affects the association between the concentration of hs-CRP and MCI are intriguing. However, this paper has some problems.

The diagnostic criteria for diabetes cited in reference #17 are old. The cut-off levels of plasma glucose and HbA1c according to current international standards (Diabetes Res Clin Pract. 2014; 104: 1-52) should be described.

There is no description of how to recruit the cases of MCI with type 2 diabetes. It is necessary to write consecutive or randomly-selected, which is essential to interpret the results accurately.

There is no description of the method for calculating eGFR, or the diagnostic criteria for diabetic nephropathy.

It is necessary to analyze and discuss the influence of antidiabetic drugs on cognitive function. For instance, insulin increases the risk of hypoglycemia, which can adversely affect cognitive function.

It is necessary to calculate and verify statistical power whether the sample size is appropriate.

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

No

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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