Reviewer's report

Title: Serum concentration of eicosapentaenoic acid is associated with cognitive function in patients with coronary artery disease

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Reviewer: Kazuki Kobayashi

Reviewer's report:

In this study, the authors demonstrated that decreased serum levels of EPA and a reduced EPA/AA ratio are associated with cognitive impairment in patients with CAD, indicating that decreased EPA, rather than DHA, is a risk factor for development of cognitive impairment at this patient population.

I think this article is properly studied and well documented enough to be published on NUTRITION JOURNAL.

I would have some comments to recommend for improvement but all of them is as discretionary revisions;

1. It would be better to be discuss about the possibility of confoundings among LVEF, BNP and age because single association of LVEF or BNP with MMSE score was shown but both of them was not associated with MMSE score on multiple regression analysis.

2. It also would be better to be discussed about anti-inflammatory effect of EPA or n-3 PUFA and the possibility of its contribution to the anti-dementia effect of them.

Quality of written English: Acceptable

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 interests.