Reviewer’s report

Title: Patterns and characteristics of cognitive functioning in older patients approaching end stage kidney disease, the COPE-study

Version: 0 Date: 29 Aug 2019

Reviewer: Jie Dong

Reviewer's report:

Please overwrite this text when adding your comments to the authors.

This study aimed to describe patterns of cognitive function and to identify determinants associated with cognitive impairment in older patients reaching ESRD before dialysis.

There are several limitations

1. The prevalence and risk factors of cognitive impairment have been broadly investigated in patients with chronic kidney disease with varied extent of renal function. This study did not provide novel implications for clinical practice. The sample size is also small.

2. Since the CI is a common phenomenon in ESRD patients, it is not necessary to compare the cognitive function between participants and normal subjects (as shown in the paper: compared to the normative data of neuropsychological testing participants memory performance was in the 24th percentile, executive function in the 18th 44 percentile and psychomotor speed in the 20th 45 percentile).

3. As stated by authors, part of routine nephrogeriatric work-up a brain MRI was performed in all patients without contraindication for MRI. Only 60% of participants completed the MRI finally. This led to choose bias of subjects. How are these contraindication like? The 40% of patients have contraindication for MRI. This percentage is a bit high.

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No

Does the work include the necessary controls?
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- Are the statistical test(s) used in this study appropriate and well described?

- Is the exact sample size (n) reported for each experimental group/condition (as a number, not a range)?

- Are the description of any error bars and probability values appropriate?

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- Has a sample size calculation been included, or a description and rationale about how sample sizes were chosen?

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