Reviewer's report

Title: Low levels of Vitamin C in dialysis patients is associated with decreased prealbumin and increased C-reactive protein

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Reviewer: Kuo-Cheng Lu

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Major Compulsory Revisions

Patients with end-stage renal disease were associated with higher inflammation and oxidative stress which resulted in much morbidity and mortality. The author investigated the relationship between plasma vitamin C level and some inflammatory markers. They concluded that common lower vitamin C levels were associated with decreased prealbumin and increased C-reactive protein. It is interesting, but some issues should be addressed:

1. What are the inclusion and exclusion criteria of the study? Whether there were any limitations of other comorbidities (such as cardiovascular disease, malignancy or autoimmune disease et al) or medications (such as steroids, immune-suppressants, ACEI/ARB, statins et al)

2. There were three subgroups, receiving conventional HD, high-flux HD and hemodiafiltration (HDF), in maintenance hemodialysis (MHD) group. It may be more informative to provide the results showing whether there were any differences between each group?

3. In MHD group, compared with group A (vitamin C deficiency), group B (vitamin C insufficiency) and group C (vitamin C normal) had significantly lower age, higher albumin, higher prealbumin and lower HsCRP. The author did not discuss whether these differences of vitamin C, and nutrition were due to the different dietary intake?

4. There were some patients receiving oral vitamin C supplements. It would be more informative to provide and compare the results before, after or cross-over taking the supplements.

Level of interest: An article whose findings are important to those with closely related research interests

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.