Reviewer’s report

Title: Abdominal aortic calcification is superior to other arteries calcification in predicting the mortality in peritoneal dialysis patients – a 8 years cohort study

Version: 1 Date: 01 Aug 2019

Reviewer: Fellype Barreto

Reviewer’s report:

# Major remarks:

1. The authors must clarify if the patients who changed to a different renal replacement therapy modality, hemodialysis or kidney transplant, or moved to a different dialysis centre were withdrew of the study. According to the method section, it seems that those patients were still followed up and had their data included in the final analysis. If so, analysing data of these patients imposed a huge flaw to the study because their exposition to completely different factors related to their new treatment modality may have influenced their outcomes. In addition, patients who moved to a different dialysis centre should had been excluded of the study as well. Please, clarify.

2. In contrast to the description of the Adragao score, it does not include lateral abdominal X-Ray, but only of the hips and hands. Moreover, the method commonly used to evaluate abdominal aorta calcification by X-Ray is the Kauppila score, which is quite different form the one described in the method section (page 4; lines 55 - 60). The authors must (i) clarify from which study the method used for evaluating abdominal aorta calcification comes from to demonstrate that it is a valid method for quantifying abdominal aorta calcification and (ii) use the appropriate description and reference to the Adragao score.

3. It would be interesting to perform statistical analysis to identify the risk factors associated to the presence of vascular calcification in the different arterial sites evaluated in the study.

4. As correctly reported by the authors in the discussion section, previous studies have reported that AAC is a good predictor of cardiovascular outcomes in PD patients. Thus, which novelty the current study brings in comparison to the other studies? Only the longer follow up?

5. The finding that femoral artery calcification is an independent predictor of mortality should also be discussed in the article.

# Minor remarks:

1. The term "prognosis" should be changed for "mortality" in the title.

2. The variables age, TG and BMI should be shown as both continuous and dichotomous variables in table 1.

The text requires thorough English revision.
Please confirm that you have included your review in the ‘Comments to Author’ box?

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