Reviewer's report

Title: The role of abdominal aortic calcification in predicting mortality in hemodialysis patients: a retrospective observational study

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Reviewer: Dena Rifkin

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This is a prospective study examining the association of vascular calcifications with cardiovascular and all cause mortality among 217 maintenance hemodialysis patients, among whom < 40 deaths occurred during follow-up. The question is relevant and important, as plain X-rays are inexpensive and readily available and may be useful prognostically.

The methods are well performed, but the sample size is small and thus at best this manuscript is most useful as a means for hypothesis generation. The major points that warrant consideration are as follows:

1. Focusing on all-cause mortality may be more informative than mentioning the subgroup of those that died due to cardiovascular events. Was the study adequately powered to detect differences in cardiovascular mortality? It seems unlikely this was the case. The wide confidence intervals suggest that even those results which are statistically inconclusive may in fact simply be underpowered. Point estimates suggest that virtually all associations between VC and mortality tended to be positive.

2. There are too many figures. Would pick the relevant Kaplan-Meier curves, and simply describe the others, since they are quite similar. The Cox models are more informative overall, since the difference in age between those with/without vascular calcification is so dramatic.

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:

No