Reviewer’s report

Title: Hypertension and the Development of New Onset Chronic Kidney Disease over a 10 year period: A Retrospective Cohort Study in a Primary Care Setting in Malaysia

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Reviewer: Mariana Murea

Reviewer’s report:

In this retrospective study, the authors report on the factors that associate with new onset CKD among patients with chronic hypertension. The study showed that older age, diabetes, lower renal function at baseline, and hyperuricemia are factors associated with CKD in the hypertensive population, variables well accepted by now based on other studies as harboring risk for CKD onset.

Major Compulsory Revisions:
- It is intriguing that BP control did not have any impact on CKD incidence. Although this was acknowledged by the authors, I would recommend further exploration of this matter. For instance, do the authors have BP levels upon follow-up at 5 years and 10 years, to better ascertain the degree of BP control? On the other hand, other studies suggested that too stringent BP control can increase incidence of CKD. Do the authors have data on how many patients were on both ACEI and ARB at the same time?
- The differences between the group with and without incident CKD need to be better characterized. The authors make a call of "every effort is needed in order to detect the CKD earlier". As it stands, the factors associated with CKD in this study are non-modifiable (older age, lower serum creatinine at baseline), or unknown whether correction would impact renal function (for hyperuricemia) and diabetes. Recommend further description of the diabetic subgroups. How many patients with diabetes had achieved BP control, contrasting to those without diabetes? Was there any difference in A1c levels between diabetics who developed CKD and those who did not develop CKD?
- If analyses were adjusted by baseline GFR, the reviewer does not see any justification for adjusting for baseline serum creatinine at the same time. Please clarify the reason for both.
- The reviewer also asks for clarification of whether older age, hyperuricemia, and diabetes were independently associated with new onset CKD once adjusted for baseline GFR.

Minor Essential Revisions:
- In the abstract - methods paragraph - please note that the study was labeled incorrectly as randomized. Please correct the error.
**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests