Reviewer's report

Title: Impact of Hypertension with or without Diabetes on Left Ventricular Remodeling in Rural Chinese Population: a Cross-Sectional Study

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Reviewer: B Trimarco

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The study evaluated the impact of hypertension with or without diabetes on left ventricular hypertrophy (LVH) and geometrical changes in a rural Chinese population.

The results of this study was interesting because it demonstrated that hypertension was associated with LVH and geometrical changes in a large rural Chinese population, and this risk association almost doubled for LVH and concentric hypertrophy when accompanied by diabetes, especially for women. In fact, when compared with HT group, those in HT+DM group had higher risk for to development LVH and concentric hypertrophy in the total and female population separately, but no association of HT+DM with LVH and abnormal geometrical patterns was found in men.

These results confirm the synergistic effects of hypertension and diabetes about the development of more serious LV hypertrophy (please consider a recent paper: Eur Heart J. 2013 Nov;34(44):3419-26) and remodeling, and the cited hypothesis about a sex-specific difference (the presence of sensitive estrogen receptors in cardiomyocytes and insulin resistance in diabetes counterbalancing the favorable cardiovascular effects of estrogen in women) is very interesting (this data confirm the results of a recent paper: Hypertension. 2017 Jan;69(1):136-142.).

The authors have information of levels of glycated hemoglobin (HBA1c) and its correlation with LVH?

For subgroup with hypertension are available information's regarding the type of hypertensive durugs, dose, and compliance?
**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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