Reviewer’s report

Title: Gender differences in plaque characteristics of nonculprit lesions in patients with coronary artery disease

Version: 0 Date: 17 Dec 2018

Reviewer: Bledar Daka

Reviewer's report:

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Dear Editor,

Thank you for the opportunity to revise this interesting manuscript.

In this manuscript: "Gender differences in plaque characteristics...." of Tian et al., the authors investigated the differences in plaque characteristics in a population with acute coronary syndrome. They found differences in the plaque morphology. In fact, the plaque in men had higher lipid index and larger lipid core when compared with women. Moreover, the length of the plaque in men was larger than in women.

There are however some concerns with regard to the results and their interpretation as described below.

Major:

1. The analyses on this study were based on descriptive data and no adjustments for possible confounding were computed. The authors motivate the lack of power as a reason to not present the adjusted data however due to the large differences in age and smoking habits it should be more informative for the reader to receive that information in the manuscript.

2. In the study limitations the age difference as a possible confounding should be discussed in line of previous evidence on the impact of the age on plaque characteristics. [link]

3. The main findings and conclusions should be adapted to the results after adjustments for age and smoking habits.
Minor:

It would be helpful for the reader if the authors provide a flow-chart for the study population and participants.

In table 1 there are some differences in the inflammation between genders that are not discussed further. I suggest a short discussion on that and the possible impact in the results.

In table 1: Information on family history and physically activities should be provided if disposable.

E-gfr should also provide information on whether men have lower kidney function than women in this population.

Table 3: Abbreviations in the title should be avoided.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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.

No

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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