Reviewer's report

Title: Epicardial Adipose Tissue Is Related to Arterial Stiffness and Inflammation in Patients with Cardiovascular Disease and Type 2 Diabetes

Version: 0 Date: 19 Nov 2017

Reviewer: Marek Rajzer

Reviewer's report:

(Page: 3, lines : 40-45) Abstract- Results section.

There is:

EAT measurements were significantly higher in the groups with CVD, with or without T2DM compared to patients without CVD or T2DM (group 1 EAT 15.9 ± 5.5 cm² vs. group 4 EAT 11.8± 4.1 cm², p=0.001; group 3 EAT 15.1 ± 4.3 cm² vs. group 4 EAT 11.8 ± 4.1 cm², p=0.024).

Comment:

The definition of 4 distinguished subgroups is not fully clear. Is group 1 composed of CVD patients with diabetes? Similar questions to each other group.

(Page: 5, lines: 57-59 and Page: 6, lines 4-5)

There is:

Tentative supportive evidence of a systemic effect of EAT is provided by the association between EAT and peripheral arterial stiffness, a known predictor of adverse CV outcome.[12]

Comment:

Cited reference by Willum-Hansen et al. is dedicated to prognostic value of aortic PWV, which is large artery stiffness index. I am not sure if it is correct to use the term: `peripheral' to this index, because represents the stiffness of aorta not peripheral (usually muscular) arteries, however I understand that in the context of heart, coronary arteries and EAT aorta might be considered as a `peripheral' artery.

In the discussion ( Page: 11, lines: 57-59) the authors wrote: Second, we have shown that EAT is significantly associated with PWV, a marker of systemic arterial stiffening...
This is definitely a better term than 'peripheral', previously used, however ESC expert consensus document counts carotid femoral PWV rather to proximal stiffness indices and precisely to regional stiffness indices. I hope this document will be helpful for authors in terminological issues. See: Laurent S, Cockcroft J, Van Bortel L, et al. Expert consensus document on arterial stiffness: methodological issues and clinical applications. European Heart Journal 2006: 27; 2588-2605.

Page: 22, Table 1.

There are significant differences in age between distinguished subgroups, not mentioned in the Baseline Characteristics on page 9. Looking on the Table 1. group 1 and 3 seems to be older than 2 and 4. This might be important because EAT is higher in group 1 and 3 than in 2 and 4. What is surprisingly this difference in age is not reflected by the difference in PWV, the variable typically age dependent. Please consider to describe these findings.

**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:

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