Reviewer’s report

Title: Comparison of short axis and long axis acquisitions of T1 and extracellular volume mapping using MOLLI and SASHA in patients with myocardial infarction and healthy volunteers

Version: 0 Date: 19 Jun 2018

Reviewer: Francesco Secchi

Reviewer's report:

Design: prospective study.

The purpose of this paper is to determine the impact of slice position and orientation on T1 and ECV measurements using MOLLI and SASHA T1 mapping sequences in patients with myocardial infarction and in healthy volunteers.

Comments as follows:

Background

1. I am not sure that SASHA are a most common sequences for T1 mapping. This is true only for MOLLI. Please modify the text.

2. It is not very clear if you want to compare MOLLI vs SASHA or short vs long axis or both. Please specify better the design of this study.

3. Please use native T1 instead of derived T1 in all text.

Methods

4. Did you measure the same wall in short axis and long axis plane or did you consider the global value of native T1 and ECV?

5. The long axis measurement means in 3, 2 or 4 chamber view depending on the short axis wall? Please describe in details the methods of measurement because is not clear.

6. You didn't use the colored T1 mapping maps derived from MOLLI sequences?

Results

7. It is not clear if you compare short and long axis native T1 and ECV in MOLLI sequences or both MOLLI and SASHA.

Figure
8. ok

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.

No

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:

Needs some language corrections before being published

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