Reviewer’s report

Title: Speckle tracking echocardiography-determined measures of global and regional left ventricular function correlate with functional capacity in patients with and without preserved ejection fraction

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Reviewer: Piotr Lipiec

Reviewer’s report:

This is an interesting, well-conducted study and a well-written manuscript. The paper has important practical implications.

Minor Essential Revisions:

1. Authors state that “the tracking quality of each segment was visually evaluated and if tracking was felt to be inaccurate, strain analysis of that segment was not included”. What’s the percentage of myocardial segments that were excluded from STE analysis due to suboptimal image and/or tracking quality?

2. The clinical characteristics of the study group is limited – authors indicate that “Adult patients who were referred for an echocardiogram for clinically indicated reasons (...) were approached for enrollment”. What were these reasons in the study group? What were the reasons of systolic function impairment in the subgroup of patients without preserved ejection fraction (were they ischemic/non-ischemic)?

3. How many patients had clear regional wall motion abnormalities and what were the most prevalent localizations of these regional wall motion abnormalities (maybe this could partially explain why there were differences between various myocardial regions in the strength of correlation between strain and DASI)?

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

Speaker fees from Philips, GE and Siemens