Reviewer’s report

Title: Perpendicular and turbulent flow after aortic valve replacement: Paravalvular or transvalvular leakage? – A case report

Version: 0 Date: 13 Oct 2019

Reviewer: Rune Haaverstad

Reviewer's report:

The paper is of interest in view of the large number of standard, surgical AVR (SAVR) operations being done and the requirement of high standards and benchmarking versus both SAVR and TAVI. PVL is very well known and there are no new information about this in the paper. Regarding TVL this is of interest to document and to elaborate on, also in follow-up. However, in this case the images submitted do not include short-axis views and the perpendicular turbulent flow in the TVL image may be PVL seen simultaneously. It is less likely that a TVL is seen both a a central jet as well as a peripheral jet at the same time when there is also an existing relatively large PVL. If a short-axis view and a 3D view present more convincing information this should be taken into consideration.

1. As it is presented the paper is not convincing according to the aim of presenting perpendicular flow in simultaneous TVL and PVL

2. Short-axis view and 3D should also be submitted

3. The text could be shortened as PVL is well known

Level of interest
Please indicate how interesting you found the manuscript:

An article of limited interest

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

Needs some language corrections before being published
Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

N/A

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal