Reviewer’s report

Title: Evaluation Using a 4D Imaging Tool Before and After Pulmonary Valve Replacement in a Patient with Tetralogy of Fallot; What Is the Optimal Timing of Re-operation?

Version: 0 Date: 26 Oct 2018

Reviewer: Joji Ishikawa

Reviewer's report:

1. Do you believe the case report is authentic?
   Yes

2. Do you have any ethical concerns? Please consider if local Institutional Review Board approval or ethical approval was obtained (if appropriate) and if the patient (or their parent or guardian in the case of children under 18) gave written, informed consent to publish this case and any accompanying images. A statement to this effect should appear in the manuscript.
   Comments: no

3. Does the Introduction explain the relevance of the case to the medical literature?
   Yes

4. Does the article report the following information? Where information is missing, please specify.
   a. The relevant patient information, including:
      - De-identified demographic information (age, gender, ethnicity)
      - Main symptoms of the patient
      - Medical, family and psychosocial history
      - Relevant past interventions and their outcomes
      Yes
   b. The relevant physical examination findings
      Yes
   c. Important dates and times in this case (if appropriate, organized as a timeline via a figure or table); if specific dates could lead to patient identification, consider including time relevant to initial presentation, i.e. initial presentation at T = 0, follow up at T = 1 month.
Yes
d. Diagnostic assessments, including:
   - Diagnostic methods
   - Challenges (e.g., financial, language/cultural)
   - Reasoning and prognostic characteristics (e.g., staging), where applicable

Yes
e. Types and mechanism of intervention

Yes
f. A summary of the clinical course of all follow-up visits

Comments: OK

5. Is the interpretation (discussion and conclusion) well balanced and supported by the case presented?
Comments: Yes

6. Is the anonymity of the patient protected? Please consider any identifying information in images such as facial features or nametags, whether the patient is named etc. If not, please detail below.
Yes

7. Is the Abstract representative of the case presented?
Comments: Yes

8. Does the case represent a useful contribution to the medical literature?
Comments: Yes

9. Additional comments for the author(s)

Comments to the authors

Timing of operation for pulmonary artery stenosis after operation of TOF is controversial. The authors evaluated RV energy loss using a 4D imaging tool of cardiac MRI, and reported a case in which energy loss was decreased after operation of PS.

There were some comments from the reviewer to improve the understanding of this paper.
1. Although evaluation of RV function using echocardiography is difficult because of its anatomical shape, echo data of RV function such as TAPSE, s' of TV, FAC, and RV strain would be informative for doctors who don't have the 4D imaging tool.

2. Which was the most important factor to reduce energy loss of RV?

3. The reader will not know normal value and cut off to operate of energy loss.

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

An article of importance in its field

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

Acceptable

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Please complete a declaration of competing interests, considering the following questions:

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Were you mentored through this peer review?

No