

## Peer Review File

Article information: <https://dx.doi.org/10.21037/jovs-23-34>

### Reviewer Comments

This is a case report where the authors have deployed a perceval sutureless valve into the pulmonary position in a high surgical risk patient with carcinoid disease.

***Response: We thank the esteemed Reviewer for their time and for providing us with valuable input and constructive feedback.***

#### 1. Abstract:

- Line 51-54: The background should focus more on the specific case these authors are presenting, namely a sutureless prosthetic valve in the pulmonic position, and not sutureless prosthetic valves in general.

***Response: We have made the requested revisions.***

- Line 59-60: The authors cannot conclude that sutureless valves have greatly facilitated complex cardiac surgery based on this one case. They can only conclude on the clinical outcome of this one case.

***Response: We have edited the wording.***

#### 2. Introduction:

- Line 118-123: Although it is correct that pulmonary valve replacement is most commonly performed in the congenital population, the surgical outcomes and the superiority of PVR vs. TPVR in this population cannot be applied to this case. It is more relevant to look at PVR in acquired pulmonary valve disease and what drove the authors to perform this unconventional surgical strategy in this case.

***Response: We have revised the wording.***

#### Rationale and knowledge gap:

- Line 134-135: The rationale to why the authors decided to use a sutureless prosthetic valve on the pulmonary valve position is not mentioned. Something that is of great interest.

***Response: We have made the requested revisions (line 155-56).***

#### 3. Case description

- Line 160: How severely was the pulmonary valve affected by the carcinoid heart disease. Was there fibrous tissue on all three leaflets causing the pulmonary valve to be stenotic?

***Response: Yes, the cusps were thickened. We have added a figure to show this as well.***

- Line 176: Have there been any investigations to why the patient developed ileus?

***Response: We have corrected the manuscript; the patient developed ischemic gut.***

Do the authors have any gradients to report concerning the perceval valve in the immediate post operative phase and at follow up?

***Response: We have added this information.***

4. Key Findings: They are not reporting the key finding which surely is that they successfully managed to use a perceval valve in the pulmonary valve position and that it functioning at 1 year follow up.

***Response: We have now reported those important pieces.***

5. Comparison with similar research: the authors do not refer to any studies to support their claim.

***Response: We have now added citations to support our claims.***

6. Explanation of Findings:

Line 205: It is not described in the case that the RVOT of the patient was small. Is that the reason the surgeons chose to close with a pericardial patch?

***Response: This has now been added.***

7. Figures:

- Video 1 – this video is irrelevant to the case

***Response: This video has been removed.***

- Video 2 – line “171-172” “There was no evidence of TR or tricuspid valve stenosis (TS)” However, this echocardiographic view is more important demonstrating that there is a small paravalvular leakage post operative. - Video 2 should be referred accordingly in the text.

***Response: We have made the requested revisions.***

It would be nice to see peroperative picture of the state of the carcinoid pulmonary valve.

***Response: We have added more figures; both pre-op and at follow-up.***

8. The patient had a one-year follow-up, and it would be nice to have an echocardiographic image to compare with the preoperative and immediate post operative.

***Response: Images have now been added.***

9. In summary, the organization of the text could be improved. The focus should be more narrow towards patients with acquired pulmonary valve disease and it should be more clarified to why an unconventional surgical approach was performed.

***Response: We have made the requested revisions.***

10. Grammatical pet peeve:

If an abbreviation is not repeated in the text, it is not necessary to abbreviate in the first place.

***Response: We have made the requested revisions.***

**Editorial Comments**

***Response: We thank the Editors for their time and for providing us with valuable input and constructive feedback.***

1. Thank you to the authors for revising the article’s structure according to our structure template. However, the current abstract is overly concise and would benefit from further expansion. We request that the abstract be developed to encompass between 200 and 350 words.

***Response: We have made the requested revisions.***

(1) Please emphasize the novelty of this case in the Background of the Abstract. Suggest how this case contributes to existing knowledge and practices in cardiac surgery, especially in the context of carcinoid heart disease.

***Response: We have made the requested revisions.***

(2) The Case Description of the Abstract should include the patient’s demographic details, main symptoms, history, important clinical findings, outcomes and follow-ups. And briefly describe the surgical procedure, highlighting any unique challenges or adaptations made for the Perceval valve’s placement in the pulmonary position.

***Response: We have made the requested revisions.***

2. Please include “case report” as the keyword.

***Response: We have made the requested revisions.***

### 3. Highlight Box:

In “Key Findings” section, it would be beneficial to expand on the specific benefits of using a Perceval bioprosthetic valve in the pulmonic position. For instance, mention its potential advantages in terms of reduced operative time, improved hemodynamics, or enhanced patient recovery.

***Response: We have made the requested revisions.***

### 4. Introduction

(1) Please avoid redundancy (e.g., “reduced operative times” is mentioned twice in the first paragraph).

***Response: We have made the requested revisions.***

(2) The third paragraph is well-written but could be more concise. You could focus on aspects of carcinoid syndrome that directly relate to your case, especially the cardiac manifestations.

***Response: We have made the requested revisions.***

### 5. Case Presentation

(1) “Investigations confirmed carcinoid syndrome ...”, please elaborate on the diagnostic tests and investigations performed (e.g., types of scans, biopsies, laboratory tests) and their results. Explain how these led to the diagnosis of carcinoid syndrome with a primary NET.

***Response: We have made the requested revisions.***

(2) Please specify the patient’s ethnicity and the date of the surgery in the Case Presentation section.

***Response: We have made the requested revisions.***

(3) Could the authors provide the patient’s follow-up results, such as the image of echocardiogram? This would offer readers a more tangible comparison of the positive postoperative outcomes.

***Response: We have made the requested revisions.***

### 6. Discussion

(1) In section "3.1 Key Findings," it would be beneficial to provide a bit more detail on how the use of the Perceval sutureless valve specifically addressed the unique challenges posed by the patient’s condition.

***Response: We have made the requested revisions.***

(2) In “3.3 Comparison with Similar Researches”, the authors are encouraged to supplement the section with references and data pertaining to the use of sutureless valves in comparable clinical scenarios. This comparison will enrich the discussion and provide a broader context for the study’s significance.

***Response: We have made the requested revisions.***