Author’s response to reviews

Title: Giant right coronary artery aneurysm mimicking a right intra-ventricular mass: a case report

Authors:
Peng Teng (1516066@zju.edu.cn)
Chengyao Ni (ncy228@sina.com)
Qianhui Sun (291365199@qq.com)
Yiming Ni (1183020@zju.edu.cn)

Version: 1 Date: 12 Dec 2019

Author’s response to reviews:

Dear Vipin Zamvar
Editor-in-Chief
Journal of Cardiothoracic Surgery
RE: Manuscript (JCTS-D-19-00304) entitled “Giant right coronary artery aneurysm mimicking a right intra-ventricular mass: a case report”

Thank you very much for your decision letter and comments. We also express our sincere gratitude to the reviewers for their constructive and insightful comments and suggestions. We have revised the manuscript comprehensively and significantly. Please find below a point-by-point response to the reviewers' comments. We sincerely hope that the revision is acceptable for publication.

We look forward to hearing from you at your earliest convenience.

Sincerely,
Yiming Ni

Authors’ Response to Reviewers’ Comments

Replies to Reviewer 1
1. The case is of interest and quite well presented. However, it would be better understood if the surgical management of the coronary artery would be further detailed. They claimed that they did not perform bypass surgery but it is not clear whether they occluded or not the artery to treat this aneurysm, which may have had an impact in the medium-term postoperative outcome.

Response: Thank you for your valuable suggestion. Details of surgical management has been added in the revised version as follows (Page 4, Line 79-84): The mass was fully exposed until the posterior leaflet was detached from annulus and was confirmed as a thrombosed right coronary artery aneurysm with collagen-like degenerative fibrous coating. The aneurysm was resected as much as possible and the stump of the feeding vessel was closed by continuous suture with 5-0 prolene. The posterior leaflet was reattached to the annulus by continuous suture with 5-0 prolene (Fig. 1F). Due to absence of evidence of myocardial ischemia either on TTE or electrocardiogram, no bypass surgery was performed.
2. Would a CABG during the first operation be helpful by avoiding the fistula at distance?
Response: Thank you for your question. After experiencing this case, we realized that surgical resection with bypass surgery may be an ideal surgical strategy for such condition (Discussion, Page 6, Line 124-126; Conclusion, Page 7, Line 137). We hope our case could provide valuable information to cardiologists in this field.

Replies to Reviewer 2
1. It is necessary to get a native English speaker or an excellent English writer to take care of the language, which at present is not acceptable.
Response: We apologize for not reviewing the original manuscript carefully prior to submission. The manuscript has since been revised thoroughly with the assistance of a native English speaker. The changes were highlighted in the revised version.

2. Did the authors think that the aneurysm was a malignant tumor? Otherwise it may have been more logical to ligate the RCA above and below the aneurysm and perform a graft to the distal RCA.
Response: Thank you for your question. We made the initial diagnosis of right ventricular malignant tumor due to its features of right-sided location, irregular shape, presence of feeding vessel and internal enhancement (Case Presentation, Page 4, Line 72-74).

3. Was the feeding vessel seen on CT ligated to prevent fistula formation. The tricuspid excision and revision should be described in more detail.
Response: Thank you for your question. We have detailed the surgical management in the revised version (Page 4, Line 79-84) which could make the manuscript better understood. The stump of the feeding vessel was closed with continuous suture by 5-0 prolene. The posterior leaflet was detached from the annulus first. After aneurysm resection, the posterior leaflet was reattached to the annulus with continuous suture by 5-0 prolene.

4. Was there any tricuspid regurgitation on postoperative echo? Was there evidence of remaining aneurysm?
Response: Thank you for your question. Only trivial tricuspid regurgitation was detected on postoperative echocardiography so we didn’t mention it in the manuscript. Information pertaining to aneurysm is detailed and highlighted in the revised version as follows (Page 5, Line 89-90): No evidence of remaining or recurrence of aneurysm was detected.

5. Did the authors evaluate the size of the left to right shunt caused by the presence of a fistula between RCA and RV. This can be expected to gradually enlarge since it is quite big and comes from an enlarged RCA. This may eventually cause ischemia as well.
Response: Thank you for your question. The echocardiography showed the fistula with a diameter of 2.3 mm. The quantity of shunt flow wasn’t evaluated. The patient had no complaint and no evidence of myocardial ischemia. As you suggested, we describe our strategy for further treatment of the fistula in the Case Presentation (Page 5, Line 91-92) as follows: Further treatment will be taken if evidences of myocardial ischemia occur in the future.

6. The picture of the tricuspid valve repair is not easy to evaluate, so if the authors have better pictures it may be helpful.
Response: Thank you for your suggestion. We apologize for the poor picture quality. To make the picture better understood, we add details of surgical management in the revised version (Case Presentation, Page 4, Line 79-84; Figure Legends, Page 10, Line 207-208). We hope it will be helpful.