Reviewer’s report

Title: The correlation between the height of mitral valve coaptation and mitral regurgitation after mitral valve repair

Version: 0 Date: 23 Jul 2017

Reviewer: Akimasa Morisaki

Reviewer's report:

This study evaluated the correlation between the coaptation height and mitral valve regurgitation after mitral valve repair. Deep coaptation height after mitral valve repair may be important to prevent recurrent mitral valve regurgitation and improve the long-term outcomes. The authors show this correlation that increasing of coaptation height after mitral valve repair decreased the recurrent mitral valve regurgitation. However, I think that this study requires major revisions for the following reasons.

Major revisions

1) The detail methods of mitral valve repair should be showed because the type of mitral valve repair, such as resection and suture, neochoadrual repair, edge to edge suturing, and so-on, associates with recurrent mitral valve regurgitation at long-term.

2) Please show the detail of patient's background, and intra- and postoperative outcomes, such as comorbidity, etiology of mitral valve regurgitation, operation time, cardiopulmonary bypass time, cardiac arrest time, complications, and so-on.

3) The mitral valvuloplasty may be inadequate phrase in manuscript. The phrase of mitral valve repair may be better in manuscript.

4) The sentence 'CH have a statistically significant negative correlation with the degree of mitral regurgitation' in Abstract, Result, Conclusion section may be inadequate because the sentence evokes that increasing CH leads the severe mitral regurgitation after the mitral valve repair. Therefore, the authors should be revised the sentences.

5) The matter of Discussion section may be insufficient. The authors should be considered about the correlation between coaptation height and methods of mitral repair, and etc.

6) Please add the informed consent and ethics.
Minor revisions

1) The sentence 'In mitral valvuloplasty, the greater the mitral valve coaptation area is...’ in Introduction section, line 19-20, is incomprehensible. Please revise the sentence.

2) There is some lousy typing through the manuscript.

3) Please undergo the native speaker checks.

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

An article whose findings are important to those with closely related research interests

Quality of written English
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