Reviewer’s report

Title: How to make an aortic root replacement simulator at home

Version: 1 Date: 4 January 2015

Reviewer: Masashi Komeda

Reviewer’s report:

This is an interesting paper focusing on the training of aortic root valve procedures. Certainly this type of training devices will be more important.

This reviewer wish to raise some comments or questions in order to improve the quality of the paper.

1. The figures are not clear enough. Perhaps some pictures came from video films but their resolutions are not high enough.

2. The design of the valve cusps are not natural. The aortic ring should not be that straight. This is important from the viewpoint of training. Beginners often encounter difficulties in placing sutures to/around the commissures, and the current device cannot provide good simulations to it. The authors should at least comment it.

3. How can they evaluate the quality of anastomoses? It is important in this type of training system to provide a good way of evaluation so that the trainee can know what was wrong in their work.

4. There is no discussion part in the paper. This reviewer suggests that most part of the current conclusions can be moved to discussion part and the last part of the current conclusions can be the new conclusions.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests' below.