Reviewer’s report

Title: Echocardiography-guided percutaneous closure of perimembranous ventricular septal defects without arterial access and fluoroscopy

Version: 1 Date: 03 Aug 2019

Reviewer: Özge Pamukcu

Reviewer’s report:

Revision

The answers of authors are satisfactory but I also wanted the authors clarify some points that:

1. Title is too long, difficult to understand. It will be better if it is short but striking.

3. The authors emphasized that all procedure is done without fluoroscopy. However; I'm curious about that using TEE did not prolong the procedure. While all interventionalists are used to work with fluoroscopy, the images are familiar and easy to proceed. According to my opinion: it is hard to be sure the position of the wires, delivery system and the device by TEE and it prolongs the procedure and so the duration of anesthesia. Could the authors compare the duration of VSD closure with and without fluoroscopy.

4. Without having arterial route how the interventionalists can feel themselves safe whether in the case of device embolism? I think that not having an arterial route puts the patient under serious risks and it is more important than having vascular injury.

5. I don't agree that "Furthermore, radiation exposure in childhood may significantly increase the risk of cancer, since children have immature developing organ and tissue structures." The dosage that the patients were exposed is not too much to cause cancer also the patients are usually exposed to radiation once not repeating times. If you look in this manner the interventionalists are under much more risk than patients because they are exposed in every work day with repetitive times and they do not have radiation shields for their head, extremities like hand and foot etc.

6. The authors could benefit from the following articles

Is it safe to close ASD with the guidance of transthoracic echocardiography in pediatric population "ten years' experience of a single center". J Interv Cardiol. 2015 Apr;28(2):172-9

Safety and efficacy of percutaneous intervention for children with combined congenital heart abnormality solely guided by transthoracic echocardiography Zhonghua Xin Xue Guan Bing Za Zhi. 2018 Oct 24;46(10):804-809

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

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