Reviewer's report

Title: Intraoperative device closure of perimembranous ventricular septal defects in the young children under transthoracic echocardiographic guidance; initial experience

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Reviewer: qiuyu huang

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The authors report early results of a new hybrid technique for closing the perimembranous VSD in young children guided by TTE. The procedure consisting of a small incision followed by TTE guided device placement. They noted a high likelihood of successful placement without major complications, and noted a high total occlusion rate at follow-up. The more technical aspects of the materials and methods are more acceptable. The primary thrust of the paper is that this method is suitable when lack of TEE and X-ray equipment in the cath lab. Besides clinical complications, they also emphasis the fact that the implanted device was "domestically made". The described device is not used for a transfemoral access, but requires a "minimal inferior median incision". The authors conclude that their device technique is safe, feasible, effective.

While the authors offer an interesting topic for discussion, the paper still has several limitations. The number of patients is small. The authres also state total follow-up period were short and would be continued. So the longer follow-up should be need. As we know, TEE was superior to any other method for the measurement of rims and dimension of VSD. Why did the authors choose TTE rather than TEE? The authors demonstrated that TTE may be employed for definitive assessment of the perimembranous VSD, selection of the patient for device closure, and guidance of intraoperative perventricular device placement in young children. Do the authors mean the patient were restrictive? Do this method juet be suitable for special patients?

English should be a important communication tool used when you have editors or readers understand your new techniques. The grammar needs to be improved to provide more clarity throughout the manuscript. The English needs to be revised.

Currently, patients with the perimembranous VSD are treated either surgically or interventionally, and there is no generally accepted indication for a hybrid procedure that combines surgery. The authors try to states a hybrid procedure in the young patient guided by TTE. So I think the information of the manuscript is more useful.

In conclusion, I would recommend minor revision.

Level of interest: An article of outstanding merit and interest in its field
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: no