Reviewer’s report

Title: Transcatheter and intraoperative device closure of atrial septal defect in infants under three years of age

Version: 0 Date: 26 Nov 2019

Reviewer: S Ram Kumar

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The accompanying manuscript is a report comparing transvenous to transthoracic device closure of ASD in 186 children under three years of age. The manuscript is appropriate to the readership and the conclusions are generally congruent with the results.

I have the following suggestions for the authors to consider -

1. The authors have to better convince the reader of the indications for intervention. By their own reports, some of these ASDs were 5mm in diameter. Why did they need to be closed?
   a. I would recommend that they provide data on indications for intervention for their cohort in Table 1.
   b. They simply state RV dilation as an indication, and Figure 1 is overly simplistic. They should provide RV dimensions indexed for BSA (Z values). These should be plotted during follow-up for each patient and individual changes documented if the authors want to claim that RV dimensions normalized, as they do now.

2. A major drawback in the study is that the authors never define how they choose the interventional approach. If this technique needs to be more widely utilized, they need to define the appropriate patient for whom this procedure is applicable. When do they choose transvenous vs. transthoracic vs. surgical closure. Guardian choice, as currently reported, does not do the indication justice.

3. The authors underplay the morbidity in their study.
   a. 20% morbidity is high unless they can clarify why they believe their complications are less serious.
   b. It is not clear based on their description how they evacuate air and fluid from the right chest in the trans-thoracic group prior to completion of the procedure. Given the 5 morbidity events, the authors should elaborate on what their practices are and how the complication was managed in these 5 patients.

4. The discussion is wordy and can be significantly shortened. Also, 4-year follow-up does not qualify as long-term follow-up and this should be changed throughout the manuscript.
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