Author's response to reviews

Title: Contegra conduit for reconstruction of the right ventricular outflow tract: a review of published early and mid-time results

Authors:

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Author's response to reviews: see over
Dear Editor/Mr. Zamvar

Thank you for returning your appraisal on the Contegra paper. We had pleasure in addressing all the constructive comments of the Reviewers in the revised manuscript and we hereby provide a point-by-point response to comments raised:

Reviewer 1:

Comment 1: With regards to the morphological characteristics of the Contegra ‘vascular valved conduit’ and its limitation to be used for LVOT reconstruction. We added the following paragraph in the Introduction section:

“An inherent feature of the Contegra is the fact that being derived from the venous circulation and has the morphological characteristics of a ‘vascular’ valved conduit under conditions of low pressure similar to the pulmonary vascular tree (and not the higher pressure and hemodynamic condition of the systemic circulation). Therefore its use is not licenced for the left ventricular outflow tract.”

Comment 2: the reviewer recommended interrupted posterior suture line to prevent distal conduit stenosis.

We could not recommend the proposed technique as the interrupted technique is less haemostatic and we were unable to support this technique from the literature. We have partially addressed this comment by adding the following paragraph in the Discussion section:

“Interrupted suture line could be considered as a potential solution to the distal anastomotic stenosis but is obviously upon to surgeon’s preference to apply this technique due to increased risk of bleeding”.

Reviewer 2:

Minor Essential revisions
Comment 1- Table 1: The title should be changed to “Perioperative complications”
The title has changed as requested.

Comment 2- Table 2: “Mean” values have limited meaning and they should be removed. The time interval between the operation and the re-intervention should be added to a separate column. A new column with the medial values of the size of the grafts used could be added, if the data are available.
Mean values have been removed as requested and the whole table has been edited including median size of the grafts and need for reintervention and follow-up as separate columns.

Comment 3- Table 3: This refers to “surgical indications” and no “complications” (wrong title). It is very difficult to follow and the cumulative “incidence” has no value. The indications can be summarised in the text and the table omitted altogether.

Omitted as requested.

Comment 4- Table 4: It is difficult to distinguish between the severities of the postoperative regurgitation. The vertical columns should be better defined. If there was not any postoperative assessment of the regurgitation the space should be left blank. A new column should be added highlighting the time interval between the operation and the echocardiographic assessment (intra-operatively, 30 day, 6 months, 1 year…..). Addition to “total” is irrelevant and it should be omitted.

Table 4 has been removed and data requested to be included have been re-allocated in Table 2.

Comment 5- The timing of the echocardiographic assessment is important and if it can be extracted from the papers it would be interesting to present it in the text and also discuss it, if appropriate.

Haemodynamic performance data have now been included with time of follow-up in Table 2.

Comment 6- The title of “conclusions” should be changed to “discussion” and a final robust “conclusion” should be added.

Discussion and conclusion(s) are being edited as requested in detail.

Comment 7- The “discussion”:

o The paragraph starting “Complications were also commoner in double outlet….“ needs revising. If there are more complications in this group the type of complications should be addressed in results and discussed later with more appropriate referencing to the literature.

This has been removed from the discussion section as requested.

o Consider expanding to discuss alternative surgical options for RVOT
reconstruction like: Ross procedure and Autologous non-valve reconstruction of the RVOT.

Edited as requested

- Potential late complications (like stenosis at the level of the anastomosis) and their possible options for treatment (like balloon dilatation) should be discussed.

It is not the aim of this review to address how the complications of Contegra should be managed. For this reason we have not included further relevant information.

- If there are changes in the surgical practice among surgeons (i.e. Meyns), and especially if these series are included into the analysis and involving large number of cases, the rational behind the change should be discussed rather than just referenced.

The issue about the controversy with regards stenosis in Contegra grafts has been discussed extensively in the discussion section.

- If the authors would like to address the issue of usage of ASA for prevention of graft thrombosis and stenosis, they should discuss the suggested pharmacodynamics and evidence behind the usage of such a medication for this purpose.

This has been mentioned in the discussion with regards the aspirin use but we can only propose an RCT on this with the relevant logistic and ethical problems due to limited number of procedures performed.

Comment 8-Certain papers should be reviewed and possibly referenced.
- Chiappini B. et al, ATS; Volume 83, Issue 1, January 2007, Pages 185-187
- Sekarski N. et al, ATS; Volume 84, Issue 2, August 2007, Pages 599-605

Reference of Chiappini paper is being added. The Sekarski paper although relevant is outside the observation time frame of our study (later paper).

Comment 9- As the paper reviews the literature for early and med-term result following RVOT reconstruction with Contegra conduit the title could be changed to something more appropriate like: “Contegra conduit for reconstruction of the right ventricular outflow tract: a review of published early and mid-term results”

Edited as requested.

Comment 10-Attention to the way papers are discussed is required. Wording like “crippling omission” should be revised.
Comment 11- Personal recommendations like “Anyway, close echocardiographic follow-up is recommended” and arguments like “One might argue” should be avoided.
Edited out as requested.

Reviewer 3:

With regards the problem with the tables we have now omitted Tables 3 and 4 and we have restructured Table 2.

Sincerely

Ares Protopapas
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9 October 2008, London