Author’s response to reviews

Title: The coronary reimplantation after neoaortic reconstruction technique can make a difference in arterial switch operation

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Reviewer 1.

1) First off all, you fail to explain the nature of the study. Is the study retrospective? Is it prospective? The data was gathered from two centers. The authors state that the operations were performed by the same team of surgeons, but were the patients treated by the same ICU, ward staff?

Answer) Thank you for your meticulous review and valuable feedback. This study is retrospective study. We described in limitation session.

The main surgeon (SCS) moved to another hospital in 2003 with pediatric cardiologist, so this data was gathered from two hospitals. But he set the ICU protocol of both hospitals, and ward staff was same pediatric cardiologist. So it was nearly same in management protocol between two hospitals.

2) Secondly, you provide very little information about statistical analysis: was the distribution of the continuous variables tested? If it was, what statistical test were used? What tests were used to compare the differences between the groups? How did you allocate the patients to either treatment group? As I understand, at first the authors used one technique then switched to the other? The first technique was used by one surgeon only, while the later technique was used by five surgeons. What is the timeline of study? When in time was each technique used?
Answer) Thanks your valuable comments. We used the Chi-square test or Fisher exact test were used to compare categorical variables and the t-tests were used to compare continuous variables. The Kaplan-Meier method was used to estimate freedom from significant aortic valve regurgitation and Log-rank test for compare two groups. We added this description at statistical analysis.

Actually, the open coronary reimplantation technique was used by only SCS. 5 surgeon were performed the CRANR, before 2010 he was the only one surgeon performed the switch operation and then 4 other surgeons were performed CRANR technique.

The first CRANR was performed at 2000, but the surgical policy at that time was OCR. “We have adopted the CRANR technique since 2004 in individual CA transfer. However, in the aortocoronary flap technique, the CRANR technique has only been used since 2010.” This sentence was described on methods section.

3) The conclusions of the abstract and the main article are different. The authors should try to keep consistency between the abstract and the main article.

Answer) Thanks. We changed the description of the abstract from “CA reimplantation after neoaortic reconstruction yields better results in postoperative mortality and CA–related problems in ASO without increasing postoperative neoaortic valve regurgitation.” to “CA reimplantation after neoaortic reconstruction yields better results in mortality and intraoperative or postoperative CA–related problems in ASO without increasing postoperative neoaortic valve regurgitation”

At this stage, the does not (and due to the lack of the description of the study design and statistical analysis methods is not able to provide) provide the answer or insight to the question which technique of coronary ostia reimplantation would be safer (with regards to coronary related mortality and morbidity, and neoaortic valve function).

4) Lastly, there are some grammar, punctuation mistakes, and some editorial errors (like table 1, which should provide preoperative data, but also provides operative date, such as CPB time, aortic cross-clamp time).

Ans) Thanks. We changed the expression from “preoperative data” to “Characteristics of the patients”. Unfortunately, this manuscript had already been proofed by the language editing website. As you pointed out, we reassigned language editing company for our manuscript again.

At this point, the article needs extensive revisions in order to be published. Despite the fact that I recommend to reject this version of the article, I am waiting for the authors to make revisions and then publish a potentially very interesting article.

Reviewer 2.
Q) interesting article. Plz consider adding a little more description of the operative technique for those readers, who do not perform these particular procedures.

Ans) Thank you for your review. We added two figures for understanding the operative technique.