Journal of Cellular & Molecular Anesthesia
Volume 9 · Issue 4 · e156863

OPEN PEER REVIEW

Effects of High Potassium Cardioplegia and ATP-Sensitive Potassium Channel Openers on Endothelial Cells Against Ischemia-Reperfusion Injury

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SUBMITTED	REVISED	ACCEPTED	DOI
6 Oct 2024	6 Nov 2024	8 Nov 2024	10.5812/jcma-156863

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1 Original submission

2 comments · 30 Oct 2024 – 3 Nov 2024

Referee 1 Reviewer

ACCEPT 30 Oct 2024

Thank you for submitting your manuscript to this journal.
In my opinion, your article is acceptable; only the limitations of the study should be mentioned at the end.

Editor-in-Chief

MINOR REVISION 3 Nov 2024

The study is well-designed and well written.
Just a few minor revisions are needed to accept and finalize the manuscript in accordance with the reviewer's comments.

Thank you for the contribution.

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Revision 1

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Author's response to the reviewers' comments

We appreciate the reviewers' comments. We have revised the manuscript as point-by-point responses according to the comments. The changes that have been made in a Word file of the revised manuscript are highlighted.

Reviewer 1:
Comments

Checklist Review

1. STROBE Cohort Checklist:
- Title and Abstract: The title should indicate the study design. The abstract should provide a balanced summary of what was done and found.
- Background/Rationale: The background provides context about hyperkalemic cardioplegia and KATP channels.
- Objectives: Clearly stated objectives to investigate the impacts of KATP channel openers on endothelial cell viability and NO production.
- Methods:
- Study Design: Should specify if this is a cohort study.
- Participants: Details on how human endothelial cells were selected and treated should be provided.
- Variables: Clear definitions of outcomes (cell viability, NO production) and exposures (KCOs, cardioplegia).
- Statistical Methods: The methods used for analysis should be described, including how confounding factors were controlled.
- Results: Key results should be summarized, including participant flow and outcome measures.
- Discussion: Discuss limitations, potential biases, and generalizability of the findings.

2. CONSORT Checklist (if applicable, as this study seems more observational):
- Title and Abstract: Should identify the study as a randomized trial if applicable.
- Participants: Eligibility criteria and settings should be detailed.
- Interventions: Detailed description of KCOs and cardioplegia application.
- Outcomes: Clearly defined primary and secondary outcomes.

3. MOOSE Guidelines (if applicable for meta-analysis):
- If this study is part of a meta-analysis, the search strategy, selection process, and data collection methods should be detailed.

Summary of Findings
- The study effectively outlines the background and objectives, but more details are needed in the methods section regarding participant selection, statistical analysis, and handling of confounding variables.
- The results section should include more quantitative data, including participant numbers and statistical significance of findings.
- The discussion should address limitations and the generalizability of the results.

Recommendations
- Ensure the title reflects the study design.
- Provide detailed methods for participant selection and statistical analysis.
- Include a flow diagram for participant inclusion and reasons for non-participation.
- Discuss potential biases and limitations in the study.

The following studies are highly recommended to be added to the references

https://pubmed.ncbi.nlm.nih.gov/24102106/
https://pubmed.ncbi.nlm.nih.gov/36304768/
https://pubmed.ncbi.nlm.nih.gov/11235721/
https://pubmed.ncbi.nlm.nih.gov/33134375/

Response to the reviewer 1's comments

- Thank you for your checklist review and your recommendations. Although the STROBE Cohort, CONSORT and MOOSE checklist are not applicable to our *in vitro* experiment, we have checked the details of methodology part and put more details about the number of each experiment (as highlighted in the method part).
- We ensure that the title reflects our study.
- We added some recommended references in the introduction and discussion parts as reference number 9 and 23 in the revised manuscript.

- We added study limitations at the end of the discussion part as recommended.

Reviewer 2:

Comments

Thank you for submitting your manuscript to this journal.
In my opinion, your article is acceptable, only the limitations of the study should be mentioned at the end.

Response to the reviewer 2's comments

Thank you for your suggestion. We strongly agreed with your comment and put the limitations at the end of the discussion part (as highlighted).

2 Revision 1

1 comment · 8 Nov 2024

Editor-in-Chief

ACCEPT 8 Nov 2024

Congratulations!
The manuscript is now appropriate for publication. Thank you for your contribution to the JCMA.