

Peer Review File

Article information: <https://dx.doi.org/10.21037/gc-23-183>

Reviewer A

1) Write a more concise background section that includes three paragraphs

- 1- Brief explanation about the title
- 2- The purpose of this study
- 3- Innovation

Reply: we have modified our text as advised (see Page 1, line 29-36).

Changes in the text: Page 1, line 29-36.

2) Explain the reason for the innovation of this title in full, and the lack of information and studies is a general reason for this title. Please describe the specific reason.

Reply: we have modified our text as advised (see Page 1, line 29-36).

Changes in the text: Page 1, line 29-36.

3) It doesn't matter if it's venous or arterial! Was it not a confusing factor?

Reply: we have modified our text as advised (see Page 2, line 39 and Page 4, line 118).

Changes in the text: Page 2, line 39 and Page 4, line 118.

4) Keywords should be written in alphabetical order

Reply: we have modified our text as advised (see Page 2, line 54).

Changes in the text: Page 2, line 54.

5) The Exclusion and non-Inclusion criteria should be separated into two categories:

2. Non-Inclusion
3. Exclusion

Reply: we have modified our text as advised (see Page 4, line 128-129).

Changes in the text: Page 4, line 128-129.

6) Results from blood gases?

Reply: yes, results from blood gases.

Reviewer B

To improve the overall clarity and focus of the study, I recommend the following revisions.

1) Firstly, the title should clearly state the primary focus of the study, which is to assess the incidence rate of hypokalemia and its associated factors in a retrospective cohort study. In the whole paper, it is also recommended to limit the focus only on hypokalemia cases since hyperkalemia is rare.

Reply: we have modified our text as advised (see Page, line 3-4).

Changes in the text: Page, line 3-4.

2) Secondly, the abstract requires some revisions. The background section should be shortened and emphasize the knowledge gap and limitations of previous studies. The methods should describe the inclusion criteria, baseline factors assessment, and diagnostic criteria for hypokalemic. The results should provide a concise summary of the clinical characteristics of the study samples. In the conclusion section, the authors should provide clinical implications of the findings, including how to prevent hypokalemic cases. Avoid repeating the results.

Reply: we have modified our text as advised (see Page 1, line 29-36).

Changes in the text: Page 1, line 29-36.

3) Third, it is recommended to review the existing literature related to the incidence rates of hypokalemic cases before and after admission to the operating room, and the factors associated with these changes, especially factors related to hypokalemia. The authors should comment on the limitations and knowledge gaps in the previous studies related to the research focus. The authors should analyze the potential clinical contributions of their study.

Reply: we have modified our text as advised (see Page, line 212-216).

Changes in the text: Page, line 212-216.

4) Fourth, the methodology of the main text needs to accurately describe the clinical research design, sample size estimation, and rationales for the data collection of these baseline factors. In statistics, please describe the details of the procedures for the multiple logistic regression and the estimates of ORs for quantifying the associations.

Reply: we have modified our text as advised (see Page 5, line 157-161).

Changes in the text: Page 5, line 157-161.

Reviewer C

1. Have you done the K measurement with the blood gas analyser or in the laboratory? Because it is seen that the K with the blood gas analyser may be slightly lower than laboratory value.

Reply: The study results are based on the potassium levels measured by blood gas analyzer upon admission and upon entering the operating room. While the potassium values measured by the blood gas analyzer may be slightly lower than the laboratory values, the probability of hypokalemia in patients upon entering the operating room is still significantly higher than upon admission using the same diagnostic criteria.

Changes in the text: Page 2, line 38-41, Page 4, line 118-121 and Page 5, line 140-142.

2. It could also be interesting to see the postoperative K levels in different type of non cardiac surgical patients and relate to the outcomes. You should mention this in the limitation of the study.

Reply: We have modified our text as advised (see Page 9, line 278-281).

Changes in the text: Page 9, line 278-281.