

Reviewer #1:

Scientific Quality: Grade D (Fair)

Language Quality: Grade C (A great deal of language polishing)

Conclusion: Major revision *The authors discuss corneal endothelial injury caused by oxidative stress and acoustic cavitation during phacoemulsification and also related protective measures and implications for related fields. I think some issues should be addressed before further consideration of the manuscript. I've listed my comments below:

*There are several missing references. For example, last sentences of the first paragraph of introduction (CECs cannot regenerate after injuries, and strategies must be taken to prevent CEC loss after phacoemulsification or other endothelial injuries) has no references. So, recheck the manuscript meticulously and fix this issue. *

Response: Thank you for your suggestion. We have corrected that.

Therefore, we use the following databases to search for publications that include acoustic incubation, phacoemulsification, corneal endothelial cells, hydroxyl free radicals or reactive oxygen specifications: PubMed, EMBASE, Web of Science, ScienceDirect, etc.” This phrase is not belonged to introduction section. Also, “etc.” is not a form of scientific language. You should state clearly and specifically the methods of search under ‘Material and methods’ heading or ignore and delete it entirely. *

Response: We delete it entirely according to your suggestion. Thank you.

Your manuscript should be rechecked for English language, grammar, punctuation, spelling, and overall style. I have mentioned some of the errors below: - “This paper discusses corneal endothelial injury, oxidative stress caused by acoustic cavitation and oxidative stress on CEC in phacoemulsification, the related protective measures, and implications for related fields” should be rephrased. My suggestion is ‘This paper discusses corneal endothelial injury caused by oxidative stress secondary to acoustic cavitation during phacoemulsification and also related protective measures and implications for related fields’ . - “Cataract phacoemulsification” is a meaningless combination. You should use ‘phacoemulsification surgery’ . - “ACOUSTIC CAVITATION EFFECT AND ITS EFFECTS ON CEC” should be rephrased to ‘ACOUSTIC CAVITATION AND ITS EFFECTS ON CEC’ . - “cataract lens” should be changed to ‘cataractous lens’ . - “CECS” should be changed to ‘CECs’ . - “indispensible” should be changed to ‘indispensable’ . - “pseudolenticular bullous keratopathy” should be replaced with ‘pseudophakic bullous keratopathy’ . *

CECs play a crucial role in regulating the constant hydration of the corneal stroma and transparency” should be changed to ‘CECs play a crucial role in regulating the constant dehydration of the corneal stroma and transparency’ . *

At present, the only effective option to treat corneal endothelial dysfunction is corneal endothelium transplantation” should be changed to ‘At present, the only effective option to treat corneal endothelial dysfunction is corneal transplantation (e.g., full thickness penetrating keratoplasty or lamellar endothelial keratoplasty).

Response: Thank you for your suggestion. We have corrected that.

*A photo or schematic image of sleeve/probe can be helpful.

Response: Thank you for your suggestion. We have added a photo of sleeve/probe.

* “They found that there was no significant difference between the two groups in the number of CECs before the operation, but the number of CECs after the operation increased significantly in the group treated with ascorbic acid ($P=0.011$)” . This phrase should be rechecked and corrected. It is not possible and logical that ECD increases after surgery even with usage of ascorbic acid. I think that you meant the ECD of the treated group was higher compared to the other group.

Response: Thank you for your suggestion. We have corrected that.

Reviewer #2:

Scientific Quality: Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision I read this minireview with great interest. It is well-written and with comprehensive references about the topic. I have two suggestions: - A table summarizing the most relevant studies should be added. - A figure describing the ACOUSTIC CAVITATION EFFECT AND ITS EFFECTS ON CEC should be included too.

Response: Thank you for your help. We have corrected the manuscript as you suggested.

(1) Science editor:

The manuscript has been peer-reviewed, and it's ready for the first decision.

Language Quality: Grade C (A great deal of language polishing)

Scientific Quality: Grade C (Good)

Response: Thank you.

(2) Company editor-in-chief:

I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Clinical Cases, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Before final acceptance, the author(s) must add a table/figure to the manuscript. There are no restrictions on the figures (color, B/W) and tables.

Response: Thank you for your help. We have corrected the manuscript as you suggested.

Before final acceptance, when revising the manuscript, the author must supplement and improve the highlights of the latest cutting-edge research results, thereby further improving the content of the manuscript. To this end, authors are advised to apply a new tool, the RCA. RCA is an artificial intelligence technology-based open multidisciplinary citation analysis database. In it,

upon obtaining search results from the keywords entered by the author, "Impact Index Per Article" under "Ranked by" should be selected to find the latest highlight articles, which can then be used to further improve an article under preparation/peer-review/revision. Please visit our RCA database for more information at: <https://www.referencecitationanalysis.com/>.

Response: Thank you for your suggestion. We have visited RCA database and tried to further improve the content of the manuscript.