OPEN PEER REVIEW

Open Peer Review (OPR)

As a new feature for progressing towards transparency, we decided to open a new window for all of our editors as well as authors titled "**Open Peer Review**". We hope by this new facility, our reviewers will be more motivated and authors will be more satisfied with the review process. We believe that publishing our peer review reports could make a transparent and clear environment for all our efforts within a journal, but not all reviewers tend to publish their comments.

What is "Open Peer Review" process?

An "Open Peer Review" process is making the details of all review process (including reviewers, associate editors, and EICs comments) as "Public" as it is agreed by EIC, Authors, and reviewers.

Advantages of "Open Peer Review" process

- More transparency, constructiveness and tactful comments of the peer review process: leads to an increase in the quality of reviews
- More motivations for all involved roles in the review process
- Authors' satisfactions from the review process: Increases honesty between authors and reviewers
- Education of both authors and new students
- Prevents reviewers from following their individual agendas and leading to the detection of reviewers' conflicts of interests

You can find out more at:
https://sites.kowsarpub.com/kowsar/knowledgebase/category/tree.html#opr.html

Jentashapir Journal of Cellular and Molecular Biology
Article DOI: 10.5812/jjcmb.117977
Published in: Jentashapir Journal of Cellular and Molecular Biology: 12(3); e117977

Peer Review Report for "Attenuation of Apoptosis and Oxidative Stress by Endurance Training in the Cerebellum of Diabetic Rats"

Author(s): Asma Taheri, Abdolhamid Habibi, Saeid Shakerian, Mohammad Reza Tabandeh, Masoud Nikbakht

Review Timeline:

Submit Date: 18 Jul 2021
Revised Date: 31 Aug 2021
Accepted Date: 31 Aug 2021

Revision (0)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

Seyyed Ali Mard: Reviewer | **Revision** (0) 22 Jul 2021

Dear AE,
Having read the following manuscript entitled "Protective effect of endurance training on the cerebellum of diabetic rats; Alternation of apoptosis and oxidative stress", many major and minor concerns made which listed below:
1. Title of the study has to change to "Attenuation of apoptosis and oxidative stress by endurance training in the cerebellum of diabetic rats".
2. Match the name of studied groups in all parts of the manuscript including Abstract, Methods, Results, and Figures.
3. Replace "Experimental animal holding" with "Experimental animal center"
4. Replace "Pars and Yektatajhiz" with "Pars Company and Yektatajhiz Company"
5. as far as I know, ether can not induce enough depth of anesthesia, and using it for sacrifice is not ethical. Did the study use it to kill the animals? If so, mentioning appropriate and new references is mandatory.
6. to get reliable results, the tissue has to be snap-frozen in liquid nitrogen, not in -70 centigrade. Make sure what was the method to immediately free tissues.
7. Replace "rinsing" with "rising" in the sixth line of qReal-Time PCR DATA ANALYSIS
8. What was the used dose of STZ, 45 mg or 50 mg? because of different doses reported in

Abstract and Method.
9. Is it true to dissolve STZ in normal saline? as far as I know, it dissolves in PBS with a pH of less than 6.
10. Many studies have shown that it takes 3 days to induce diabetes after injecting STZ, while this study reported only 1 day. Recheck the time and add the appropriate references.
Thanks

Akram Ahangarpour: Reviewer | **Revision** (0) 25 Jul 2021

Dear AE,
- This is close to the title of the article. Figure 1 should be designed as a table and Figure 4A should be deleted.
- The Effect of Endurance Training on Apoptotic Inducing Factor (AIF) in Cerebellum of Type 1 Diabetic Rats
- The structure of the abstract does not conform to the format.
- The article must be edited in English.
Thanks.

REFEREE: Reviewer | **Revision** (0) 27 Jul 2021

Dear AE,
This study evaluated the protective effect of endurance training on the cerebellum of diabetic rats, based on the alternation of apoptosis and oxidative stress. Study well designed, however, there are some issues, need to be noted:
1. In the abstract, the result of the MDA analysis is missing in the result section.
2. The Introduction section is so detailed and needs to be shorter.
3. Please add an appropriate reference for the exercise protocol in the method section.
4. Please also provide a reference for the method of determination of MDA.
5. It would be better to explain in more detail about abbreviation letters, a, b, c, and d representing related P values.
6. The Material and Methods section is so detailed in some parts, especially real-time PCR.
7. One comment regarding the glucose and AIF levels, is about some data of this experiment previously published in the Annals of Applied Sport Science paper (2020) and seems to be from your group. Since the glucose and AIF, levels are the same between the two papers. If not, the author may need to replace it with a new graph.
8. It would be nice to add more recent articles in references.
Thanks.

Seyyed Ali Mard: Associate Editor | **Revision** (0) 28 Jul 2021

Dear EIC,
Regarding the comments raised by reviewers a major revision is needed.
Thanks.

Seyyed Ali Mard: EIC | **Revision** (0) 28 Jul 2021

Dear Authors,

According to the comments forwarded by reviewers, this journal gives you a chance to revise your manuscript. My major concern is high percent of similarity (47%) between this manuscript with your previous published paper entitled "The Effect of Endurance Training on Apoptotic Inducing Factor (AIF) in Cerebellum of Type 1 Diabetic Rats". Therefore, an exact and point-to-point revision is needed. To avoid extra revision, do all comments forwarded by JJCMB comments. JJCMB encourages you to submit your revision within 10 days.

Your Faithfully

EIC, Dr. Mard

OPEN PEER REVIEW

Revision (1)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

Response to Reviewers:

August 5, 2021

We would like to thank the reviewers and editor for their detailed feedback to improve our submission. We have considered each comment carefully and revised our manuscript to address the issues raised. As a result, the manuscript has undergone a major revision with some details indicated below in our response to individual comments.

Response to reviewer 1
1-Title of study was changed as suggested by the reviewer.
2-The names of experimental groups were matched trough the text.
3-Experimental animal holding was edited in the text.
4-The names of companies were edited as advised by the reviewer.
5- In all our animal experiments, a combination of ketamine (100 mg/kg) and xylazine (10 mg/kg) are used to euthanasia animals**.** We edited the protocol of animal euthanasia in the text.
6- RNA preservation for long time may be done using snap frozen in liquid nitrogen, but recent studies have shown that the quality of RNA in the -70 ° freezer does not change for months. It has been also suggested that storage at below −137°C is the glass transition temperature of water, and below that may have adverse effects on biochemical activity of enzymes and proteins due to degradation of intracellular contents. Taken together in our lab tissue samples were stored in -70 freezer and immediately used for analysis. We address the following article to confirm our pinion:

Shabihkhani M, Lucey GM, Wei B, Mareninov S, Lou JJ, Vinters HV, Singer EJ, Cloughesy TF, Yong WH. The procurement, storage, and quality assurance of frozen blood and tissue biospecimens in pathology, biorepository, and biobank settings. Clinical biochemistry. 2014 Mar 1;47(4-5):258-66.
7-"rinsing" was replaced by "rising" in the text.
8- STZ was administrated at dose of 50 mg/kg and dose was edited in the text.
9- STZ has been dissolved in cold citrate buffer at a pH of 4.5. Correct STZ preparation was replaced in the text.
10-In our experiments, diabetes induction is checked from day 2 to day 5 after STZ injection but as correctly mentioned by the reviewer, diabetes induction is detectable three days after STZ injection. We edited the text to clarify that.

Response to reviewer 2
1-Figure 1 was replaced by table and figure 4A was deleted as recommended by the reviewer. Method of AIF2 analysis was deleted from the text
2-The abstract was revised based on JJCMB format.
3-All English grammatical and writing errors wer edited and highlighted through the text.

Response to reviewer 3

1-The data related to MDA alterations was added to the abstract section.
2-The introduction was edited as advised by the reviewer.
3-Appropriate reference for training protocol was added to the text.
4- Appropriate reference for MDA measurement was added to the text.
5-Presentation of significant differences between groups using dissimilar letters is a conventional method. The text presented in the caption of the pictures and tables is also written in the same way and quite clearly.
We address the following published articles to clarify our opinion:

Cheng Z, Zhao H, Ze Y, Su J, Li B, Sheng L, Zhu L, Guan N, Gui S, Sang X, Zhao X. Gene-expression changes in cerium chloride-induced injury of mouse hippocampus. PloS one. 2013 Apr 3;8(4):e60092.

Zhao ZJ, Chi QS, Liu QS, Zheng WH, Liu JS, Wang DH. The shift of thermoneutral zone in striped hamster acclimated to different temperatures. PLoS One. 2014 Jan 6;9(1):e84396.

6-The qRT-PCR analysis, MDA measurement, section was summarized as suggested by the reviewer.
7-Figure 1 was replaced by table and figure 4A was deleted as recommended by the reviewer. Method of AIF2 analysis was deleted from the text.

We hope that the respected reviewers find that their concerns have been adequately addressed in the revised article, and this could meet the requirements for publication in the *JJCMB*

Best regards,

Dr.Asma Taheri, Ph.D
Department of Sport Physiology, Faculty of Sport Sciences,
Shahid Chamran University of Ahvaz, Iran.
PO Box: 61355-145 Phone: +98 611 33030078

OPEN PEER REVIEW

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Seyyed Ali Mard: EIC | **Revision** (1) 9 Aug 2021

Dear Authors
Thank you for revising your manuscript in accordance with the forwarded comments. I realized that there is still a comment needs to be revised before starting the next review.
JJCMB expects to receive your revision within 3 days.
Yours Sincerely
EIC, Dr. Mard

OPEN PEER REVIEW

Revision (2)

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Best regards,

OPEN PEER REVIEW

Revision (2)

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REFEREE: Reviewer | **Revision** (2) 30 Aug 2021

Dear AE,
The authors have shown a lot of effort to improve the manuscript and this should be well appreciated. It is clear that the authors have addressed all reviewer's comments carefully. As a result, it seems that the current form can be accepted for publication.
However, I recommend the authors correct just an error in the text. Please replace "quality" with "quality" in the second line of Total RNA isolation and cDNA Synthesis.
Thanks.

Seyyed Ali Mard: Associate Editor | **Revision** (2) 30 Aug 2021

Dear EIC,
The current revision is now acceptable for publishing in JJCMB.
Best Regards

Seyyed Ali Mard: EIC | **Revision** (2) 30 Aug 2021

Dear Authors
Your revision is now provisionally accepted for publication in JJCMB. Please replace quatikaly with quality in main text and paraphrase or substitute similar sentences with new ones. This journal expects to receive revision within 2 days.
Yours Sincerely
EIC, Dr. Mard

OPEN PEER REVIEW

Revision (3)

Reply to Reviewers

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August 31, 2021

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Best regards,

OPEN PEER REVIEW

Revision (3)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

Seyyed Ali Mard: EIC | **Revision** (3) 31 Aug 2021

Dear Author,
The document is reviewed carefully by the reviewers. According to their comments and your revisions as requested, this manuscript is accepted.
Thanks.