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

Archives of Neuroscience
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Published in: Archives of Neuroscience: 8(4); e118914

Peer Review Report for "Effect of Ozonated Water on Oral Mucositis and Pain Induced by Head and Neck Radiotherapy: A Cross-sectional Study"

Author(s): Farzad Ghorbani, Mohsen Yazdanian, Elahe Tahmasebi, Morteza Izadi, Bahram Mofid, Hesam Aldin Varpaei

Review Timeline:

Submit Date:	22 Aug 2021
Revised Date:	2 Oct 2021
Accepted Date:	22 Oct 2021

Revision (0)

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

REFEREE: Reviewer | **Revision** (0)

8 Sep 2021

Dear AE,
thank you for giving me the opportunity of this review
Comments for the authors:
Title:
- It is too long and complicated.
- No need to begin with “investigating”.
Abstract:
1. There are some grammatical mistakes and academic English correction Is needed.
- In line 6, what do you mean by ozonated water?
- In line 8 the correct verb is were not treated.
- In line 10 “the use of corticosteroids” is right.
- The visual analog scale should be specified as the pain visual analog scale.
- ‘The’ is used too frequently.
2. Methodology In abstract is completely Vague and insufficient, it should be revised and give informative data.
3. A structured abstract doesn’t include discussion.
Background:

- Line 33;" are also beings used to treat cancer"; is incorrect.
- Line 36, what do you mean by the destruction of the buds of the ocular buds.
- "The function of salivary gland" is the correct version.
- Line 41. this line needs a reference.
- Line 47 reference is needed.
- Lines 47-50 various and variety are used too frequently.
- Line 50;" It has been shown that the effectiveness of different methods varies"; This sentence is not clear.
- Line 52; Animal studies have shown the positive effects of ozone on cancer cells. In 52 these studies, ozone significantly increased the survival of study groups [10]; need several references due to addressing Animal studies.
- Line 57; for this treatment of this disease; this is extra.

Methods:
- No need to; Table 2. Background characteristics of study groups; only address in the text.
- The caption is needed for Table 5. Comparison of VAS-value reported by patients among study groups.
- Explanation regarding mucosa and mucositis should be in the introduction instead of the discussion.
- The oral mucosa is lined with squamous epithelium, beneath which is a fibrous connective tissue containing 147 a large number of capillaries. Wound healing in the oral mucosa follows the process of vasoconstriction, 148 blood clot formation, fibrin formation, inflammatory cell infiltration, cell proliferation, new vein 149 production, and epithelial regeneration [23].
- Matching criteria should be mentioned.

Discussion:
- Interpretation of results should be addressed.

Limitations:
- The first sentence needs correction.
- In this study, ozone therapy was used at the request of patients to turn the water containing ozone in theirs.

Sincerely

REFEREE: Reviewer | **Revision** (0) 20 Sep 2021

Dear AE,

Related to the article entitled "Investigating the effect of ozonated water on the oral mucositis and pain induced by head and neck radiotherapy: a cross-sectional study", the following comments may be considered by the authors:

1- No basic information about the effective dose, a toxic dose of ozonated water was addressed in this trial. The range of administered Ozone concentration is very wide. (from 20 ppm in 15 ml -15 min to 50 ppm in 15 ml – 3min) . A more quantitative précised method of administration makes more rational confident results. Considering this wide range with the weight of patients makes it more complicated.

2- Considering 30 sessions of radiotherapy and 50 Gray dosages should be better to be addressed by a couple of references.

3- Reffernces about the allowable dose of ozonated water is not mentioned.

4- The pilot studied which were considered (ref.14, 15, 16) are not relevant to this study. These studies are rather old and irrelevant to the material and method of the current study.
5- Table 1 is not in accordance with current references. If there is, please provide related references, and if there is not correct them.
6- At the inclusion criteria age and weight is not considered.
7- In results, VAS numbers need to be reported in more detail.
8- Table 3 could be reported in a more comprehensible way.
9- Updated references are inevitably needed.
10- Discussion requires to be rewritten.
Yours Sincerely,

REFEREE: Associate Editor | **Revision** (0) 21 Sep 2021

Dear EIC
The reviewer(s) have recommended publication, but also suggest some minor revisions to the manuscript. Therefore, I invite the author to respond to the reviewer(s)' comments and revise his manuscript.
Kind regards,

REFEREE: EIC | **Revision** (0) 21 Sep 2021

Dear Author,
Your article is reviewed by the reviewers carefully. According to their comments, this document needs minor revision. Please follow their comments as requested.
Thanks.

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.

Dear EIC, Dr Zahid Hussain Khan

Thank you for your consideration

We have corrected the comments and highlighted in manuscript. Here below we provided the answer of each comment.

Yours Sincerely.

Reviewer 1:
Dear Professor Zahid Hussain Khan,
Editor in chief
I'm writing to you, related to the article entitled "Investigating the effect of ozonated water on the oral mucositis and pain induced by head and neck radiotherapy: a cross-sectional study" , the followings may be considered:
1-No basic information about the effective dose, toxic dose of ozonated water was addressed in this trial. The range of administered Ozone concentration is very wide. (from 20 ppm in 15 ml -15 min to 50 ppm in 15 ml – 3min) . A more quantitative précised method of administration makes more rational confident results. Considering this wide range with the weight of patients makes it more complicated.

Thank you for your valuable comments. The idea of this study is primarily hypothesized and it may exist some shortages and inaccuracy, just like any scientific theory in the first steps. We do not hide the fact that more studies are needed to confirm the results of this study, especially double-blind clinical trials.
2- Considering 30 sessions of radiotherapy and 50 Gray dosage should be better to be addressed by a couple of references. Corrected (added)
3-Reffernces about the allowable dose of ozonated water are not mentioned. Corrected (added)
4- The pilot studied which were considered (ref.14, 15, 16) are not relevant to this study. These studies are rather old and irrelevant to the material and method of current study.

For calculation of sample size, the methodology consultant suggested relying on this number of patients. This is a primary finding and we suggest conducting a study with a greater sample size.
5-Table 1 is not in accordance with current references. If there is, please provide related references, and if there is not correct it. Corrected
6- At the inclusion criteria age and weight is not considered. Corrected (added)
7- In results, VAS numbers need to be reported in more details. Corrected (caption of table 5).
8- Table 3 could be reported in more comprehensible way. Corrected (added)
9- Updated references are inevitably needed. Corrected (some of references have been updated).
10- Discussion requires to be rewritten. Corrected (revised and rewrite some parts and removed or add or transferred some sentences)

Yours Sincerely,

Reviewer 2:
thank you for giving me the opportunity of this review
Title:
Too long and complicated,
no need to begin with "investigating" Corrected (investigating deleted).

Abstract:
1. There are some grammatical mistakes and academic English correction Is needed.
In line 6, what do you mean by ozonated water? Corrected (removed word reduced)
In line 8 the correct verb is were not treated. Corrected
In line 10 "the use of corticosteroids" is right. Corrected
Visual analogue scale should be specified as pain visual analogue scale. Corrected
'The' is used too frequently. Corrected
2. Methodology In abstract is completely Vague and insufficient, it should be revised and give informative data Corrected
3. A structured abstract doesn't include discussion. Corrected (removed word discussion).

Background:
Line 33 ;"are also beings used to treat cancer"; is incorrect. Corrected (are also using...)

Line 36, what do you mean by : destruction of the buds of the ocular buds Corrected

"The function of salivary gland" is correct version. Corrected

Line 41. this line needs reference Corrected

Line 47 reference is needed Corrected

Lines 47-50 various and variety is used tooe frequently. Corrected

Line 50 ;"It has been shown that the effectiveness of different methods varies";
This sentence is not clear. Corrected
Line52 ;Animal studies have shown the positive effects of ozone on cancer cells. In 52 these studies, ozone significantly increased the survival of study groups [10]; need several references due to addressing Animal studies Corrected
Line 57 ; for this treatment of this disease; this is extera Corrected (removed extra sentence)

Methods:

No need to ;Table 2. Background characteristics of study groups; only address in the text Corrected
Caption is needed for Table 5. Comparison of VAS-value reported by patients among study groups
Corrected (added)
Explanation regarding mucosa and mucositis should be in introduction instead of discussion. The oral mucosa is lined with squamous epithelium, beneath which is a fibrous connective tissue containing 147 a large number of capillaries. Wound healing in the oral mucosa follows the process of vasoconstriction, 148 blood clot formation, fibrin formation, inflammatory cell infiltration, cell proliferation, new vein 149 production, and epithelial

regeneration [23] Corrected (transferred to introduction).
Matching criteria should be mention This was cross-sectional study. Matching criteria should mostly use for cohort studies.
Discussion:
Interpretation of results should be addressed Corrected
Limitations:
The first sentence needs correction Corrected
In this study, ozone therapy was used at the request of patients to turn the water containing ozone in their

sincerely

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Revision (1)

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

REFEREE: Reviewer | **Revision** (1) 22 Oct 2021

Dear AE,
The study is reviewed carefully. According to comments and revisions by the author, this manuscript is accepted.
Thanks

REFEREE: Associate Editor | **Revision** (1) 22 Oct 2021

Dear EIC
Based on the authors' answers to the reviewers' comments, the reviewer(s) have recommended publication.
Kind regards.

REFEREE: EIC | **Revision** (1) 22 Oct 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.