

Comparison of interleukin-21 levels and its correlation with clinical parameters among healthy individuals, chronic periodontitis, and aggressive periodontitis patients

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1st Editorial decision

23-July-2020

Ref.: Ms. No. JCTRes-D-20-00033

Comparison of Interleukin-21 Levels and its Correlation with Clinical Parameters among Healthy Individuals, Chronic Periodontitis and Aggressive Periodontitis Patients

Journal of Clinical and Translational Research

Dear author(s),

Reviewers have submitted their critical appraisal of your paper. The reviewers' comments are appended below. Based on their comments and evaluation by the editorial board, your work was FOUND SUITABLE FOR PUBLICATION AFTER MINOR REVISION.

If you decide to revise the work, please itemize the reviewers' comments and provide a point-by-point response to every comment. An exemplary rebuttal letter can be found on at <http://www.jctres.com/en/author-guidelines/> under "Manuscript preparation." Also, please use the track changes function in the original document so that the reviewers can easily verify your responses.

Your revision is due by Aug 22, 2020.

To submit a revision, go to <https://www.editorialmanager.com/jctres/> and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely,

Ammar Musawi, BDS, MDS
Guest Editor
Journal of Clinical and Translational Research

Reviewers' comments:

Reviewer #1: The manuscript was well written, But I do have the following comments:

- P- Values(in the abstracts) should be reported in the result section instead of the conclusion.
- In my opinion, the lack of differences in IL-21 between GCP and GAP should have been highlighted in the conclusion

Reviewer #2: This paper demonstrates the presence of a cytokine Interleukin 21 (IL-21) within the gingival crevicular fluid (GCF) of 60 human subjects. The presence of IL-21 had not previously been measured in the gingival crevicular fluid of humans with Aggressive Periodontitis. The authors demonstrated a concentration change of IL-21 within the GCF depending on the health of the subjects' periodontal health. The main contributions of the paper are those 2 findings. I recommend that this paper be accepted with minor additions. The introduction demonstrates the complexities of certain aspects of the immune response to pathogenic challenge. I would recommend that the authors provide a reference to the statement that it is well known that a GCF assay is a more specific and sensitive assay for periodontal destruction compared to a saliva assay. The design of the study is sound and appropriate. The strict exclusion criteria for the healthy subjects was an important detail that lends additional credibility to this study. In addition, the use of only 1 examiner takes calibration errors out of the study. I would recommend that the authors state the specific plaque index and gingival index that were used in their study. In the discussion, the authors present what is currently known about specific parts of the immune system and explore the possible roles that IL-21 could be playing. I found their speculations thought provoking and reasonable. I would recommend that additional references added in reference to the association of IL-21 with various inflammatory conditions. Overall, I find this a valuable study which contributes previously unknown information about the complexities of the pathogenesis of Aggressive Periodontitis. It would be interesting to see if the concentrations of IL-21 change to the same degree in Chronic Periodontitis and Aggressive Periodontitis after periodontal therapy. If the concentrations change similarly between the 2 groups, it would lend more support to the most recent changes to the system for diagnosing periodontal diseases. Chronic Periodontitis and Aggressive Periodontitis are no longer considered separate diseases. Although, I believe that they are, in fact, 2 distinct conditions.

Authors' response

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Hiroshima, 27 July 2020

Re: revision JCTRes-D-20-00033

Dear Reviewers,

Thank you for giving us an opportunity to resubmit a revised version of our manuscript entitled

“Comparison of Interleukin-21 Levels and its Correlation with Clinical Parameters among Healthy Individuals, Chronic Periodontitis and Aggressive Periodontitis Patients.” We have addressed all comments of the reviewers using the track changes function in Word (attached as supplementary material not for publication). Moreover, every modification or rebuttal of the reviewer’s comments is detailed per comment below in red italics. We are grateful for the useful comments of the reviewers, as a result of which the paper has been considerably improved.

On behalf of the authors,

Kindest regards,

Archana Mootha

REVIEWER COMMENTS

Reviewer #1:

P- Values(in the abstracts) should be reported in the result section instead of the conclusion.

As suggested by the reviewers, p value was added in the results section and removed from the conclusion section.

In my opinion, the lack of differences in IL-21 between GCP and GAP should have been highlighted in the conclusion

As suggested by the reviewers, this statement of no difference between GCP and GAP was added to the conclusion section

Reviewer #2:

I would recommend that the authors provide a reference to the statement that it is well known that a GCF assay is a more specific and sensitive assay for periodontal destruction compared to a saliva assay.

As suggested by the reviewers, a reference was cited for these lines in our manuscript. We found a study evaluation levels of cytokine in both GC and saliva in the same study studying the same marker. The results of the study show that the sensitivity of GCF was better than that of saliva, hence this study was cited to support our hypothesis.

I would recommend that the authors state the specific plaque index and gingival index that were used in their study.

As requested by the reviewers, specific names of indices used in this study are mentioned.

I would recommend that additional references added in reference to the association of IL-21 with various inflammatory conditions.

As requested by the reviewers, previous literature for IL-21 in systemic inflammatory conditions were cited. Studies related to systemic inflammatory conditions like Rheumatoid arthritis, Inflammatory bowel disease and Sjogren's syndrome were cited in the discussion section of the manuscript.

It would be interesting to see if the concentrations of IL-21 change to the same degree in Chronic Periodontitis and Aggressive Periodontitis after periodontal therapy. If the concentrations change similarly between the 2 groups, it would lend more support to the most recent changes to the system for diagnosing periodontal diseases.

As suggested by the reviewers, we thought this is a very important future perspective and scope of this study and hence we modified lines by the reviewer to fit the context of the manuscript.

2nd Editorial decision

19-Aug-2020

Ref.: Ms. No. JCTRes-D-20-00033R1

Comparison of Interleukin-21 Levels and its Correlation with Clinical Parameters among Healthy Individuals, Chronic Periodontitis and Aggressive Periodontitis Patients

Journal of Clinical and Translational Research

Dear author(s),

Reviewers have submitted their critical appraisal of your paper. The reviewers' comments are appended below. Based on their comments and evaluation by the editorial board, your work was FOUND SUITABLE FOR PUBLICATION AFTER MINOR REVISION.

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Yours sincerely,

Michal Heger
Editor-in-Chief
Journal of Clinical and Translational Research

Reviewers' comments:

Dear authors,

The editorial board has evaluated your resubmitted manuscript in light of the reviewers' comments, and found it suitable for publication with respect to substance. However, the manuscript contains too many grammar and spelling errors that we kindly request you to correct before proceeding to publication of your manuscript. For example, there should be spaces inserted between letters/words and symbols ($P < 0.05$ should read $p < 0.05$; $n=20$ should read $n = 20$) and elsewhere:

25.336 ± 1.079 should have spaces between the values and sign (25.336 ± 1.079)
IL-21levels should also contain a space (extend comment to feature entire text)

Moreover, please round off numbers where the standard deviation does not justify listing values with 3 decimal point accuracy (25.336 ± 1.079 should read 25.3 ± 1.1)

Be consistent in your notations please, so the 1 in Th1 is at some instances subscripted while at other locations it is written in regular font.

Do not italicize figure and table references or Latin terms.

References should be inserted before the period. Please find attached the proper format for EndNote and Mendeley.

Please remove all TM (trademark) signs.

Which post-hoc test was used in the ANOVA? A post-hoc test such as Bonferroni or Dunn is needed to determine differences between groups. Please insert this information and rerun the tests if necessary.

Please use the Oxford comma when summing up 3 or more items.

Only capitalize names or where appropriate. For example, prostaglandins should not be capitalized. Saliva should also be written with lower case s.

Check the English language in general. For instance, "Alongside IL-21 stimulates fibroblastic matrix metalloproteinases (MMP) and Prostaglandins (PG) to initiate soft tissue dissolution and endures the disease destructive process" is an incorrect sentence. "Alongside" should be removed. It would help if the manuscript was proofread by a native speaker.

PMN's should read PMNs without the apostrophe.

"...et al." should always be ended with a period, while the sentence can continue in a regular manner (i.e., no capital letter after the period).

There is additional documentation related to this decision letter. To access the file(s), please click the link below. You may also login to the system and click the 'View Attachments' link in the Action column.

Authors' response

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Hiroshima, 27 July 2020

Re: revision JCTRes-D-20-00033

Dear Reviewers,

Thank you for giving us a second opportunity to resubmit a revised version of our manuscript entitled

“Comparison of Interleukin-21 Levels and its Correlation with Clinical Parameters among Healthy Individuals, Chronic Periodontitis and Aggressive Periodontitis Patients.” We have addressed all comments of the reviewers using the track changes function in Word (attached as supplementary material not for publication). Moreover, every modification or rebuttal of the reviewer’s comments is detailed per comment below in red italics. We are grateful for the useful comments of the reviewers, as a result of which the paper has been considerably improved.

On behalf of the authors,

Kindest regards,

Archana Mootha

REVIEWER COMMENTS

Reviewer #1:

Manuscript contains too many grammar and spelling errors that we kindly request you to correct before proceeding to publication of your manuscript.

As suggested by the reviewers, several grammatical and spelling errors were corrected in the entire text of the manuscript.

there should be spaces inserted between letters/words and symbols ($P < 0.05$ should read $p < 0.05$; $n=20$ should read $n = 20$) and elsewhere:

As suggested by the reviewers, space has been added between $p < 0.05$; $n = 20$.

25.336 ± 1.079 should have spaces between the values and sign (25.336 ± 1.079)

As suggested by the reviewers, space has been added.

IL-21 levels should also contain a space (extend comment to feature entire text)

As suggested by the reviewers, space has been added.

please round off numbers where the standard deviation does not justify listing values with 3 decimal point accuracy (25.336 ± 1.079 should read 25.3 ± 1.1)

As requested by the reviewers, numbers were rounded of to one number after the decimal point.

Be consistent in your notations please, so the 1 in Th1 is at some instances subscripted while at other locations it is written in regular font.

As requested by the reviewers, all Th descriptions were changed to Th1 etc.

Do not italicize figure and table references or Latin terms.

As requested by the reviewers, all italicized text was changed to non-italicized text.

References should be inserted before the period.

As requested by the reviewers, all references are included before the period throughout the text.

Please remove all TM (trademark) signs.

As requested by the reviewers, all TM signs were removed from the entire text.

Which post-hoc test was used in the ANOVA? A post-hoc test such as Bonferroni or Dunn is needed to determine differences between groups. Please insert this information and rerun the tests if necessary.

As requested by the reviewers, a Bonferroni post hoc test for ANOVA was used in for analysis and has been added as table and text in the text of manuscript.

Please use the Oxford comma when summing up 3 or more items.

As requested by the reviewers, all areas summing p 3 or more items were edited and an oxford comma was added.

Only capitalize names or where appropriate.

As requested by the reviewers, capital letters in places were unnecessary has been removed.

Check the English language in general. It would help if the manuscript was proofread by a native speaker.

As requested by the reviewers, the entire manuscript text was reviewed by us for any grammatical errors or spelling errors. However, we would kindly like to inform to the reviewers that it was not possible to get the text checked by a native speaker. We apologize for this and request the reviewers to please let us know if manuscript requires further English corrections. We are extremely glad to re-check the text again if necessary.

PMN's should read PMNs without the apostrophe.

As requested by the reviewers, all words PMN's were changed to PMNs

"...et al." should always be ended with a period, while the sentence can continue in a regular manner (i.e., no capital letter after the period).

As requested by the reviewers, et al was followed by a period without a capital letter in all areas of the manuscript text.

3rd Editorial decision
04-Nov-2020

Ref.: Ms. No. JCTR-D-20-00033R2
Comparison of Interleukin-21 Levels and its Correlation with Clinical Parameters among Healthy Individuals, Chronic Periodontitis and Aggressive Periodontitis Patients
Journal of Clinical and Translational Research

Dear authors,

I am pleased to inform you that your manuscript has been accepted for publication in the Journal of Clinical and Translational Research.

You will receive the proofs of your article shortly, which we kindly ask you to thoroughly review for any errors.

Thank you for submitting your work to JCTR.

Kindest regards,

Michal Heger
Editor-in-Chief
Journal of Clinical and Translational Research

Comments from the editors and reviewers: