

[Manuscript ID: 69672]

Dear editors and reviewers of *World Journal of Clinical Cases* Editorial Office,

We sincerely thank you for reviewing our manuscript “Multidisciplinary non-surgical treatment of advanced periodontitis: A case report”. We do appreciate your valuable suggestions and rigorous attitude contributed to our research. Additional evidences were provided to support our findings as much as we could. All revisions made to the manuscript were marked red. Your kind comments were addressed point-by-point as following:

Responses to Science Editor:

1. Scientific quality: The manuscript ID: 69672 with the following title, Multidisciplinary non-surgical treatment of advanced periodontitis: A case report, is consistent with the journal’s scope and instructions. (1) Classification: Three peer reviewers have given a C grade for scientific quality and a B grade for Language quality. The final recommendation by these reviewers are: 1) Minor revision, 2) Major revision and 3) Major revision. (2) Summary of the Peer-Review Report: All the reviewers believe that the authors have to ameliorate several parts within the introduction and especially the method sections. Moreover, the figures’ names and legends should be corrected. The reviewers have concerns about clinical evaluations and the device used in this case report study. For example, the authors are invited to mention detailed instructions regarding the orthodontic treatment that was initiated and the correct mentioning of the periodontal endoscope, Florida Probe. (3) References: A total of 24 references are cited and they are generally acceptable. (4) Self-cited references: This aspect is respected. The self-referencing rate should be less than 10%. Please keep the reasonable self-citations (i.e. those which are most closely related to the topic of the manuscript) and remove all other improper self-citations. If the authors fail to

address the critical issue of self-citation, the editing process of this manuscript will be terminated. (5) References recommendations: Not applicable. The authors have the right to refuse to cite improper references recommended by the peer reviewer(s), especially those published by the peer reviewer(s) him/herself (themselves). If the authors find the peer reviewer(s) request for the authors to cite improper references published by him/herself (themselves), please send the peer reviewer's ID number to editorialoffice@wjgnet.com. The Editorial Office will close and remove the peer reviewer from the F6Publishing system immediately.

2. Language evaluation: The language quality is acceptable (Grade B). Some English polishing is necessary. The Non-Native Speakers of English Editing Certificate is provided.

3. Academic norms and rules: The authors must provide the signed Conflict-of-Interest Disclosure Form and Copyright License Agreement, and the Institutional Review Board Approval Form. Written informed consent was waived. No academic misconduct was found by the Google/Bing search.

4. Supplementary comments: This is not an invited manuscript. Informed written consent was obtained from the patient. This work was supported by the Nanjing medical science and technology development program (no. YKK17139), China.

5. Issues raised: Not applicable.

6. Re-Review: This is required by reviewers.

7. Recommendation: Major revision.

Language Quality: Grade B (Minor language polishing)

Scientific Quality: Grade C (Good)

Response : Thank you for your careful and efficient review, we have responded to all the review comments and upload the revised manuscript along with other attachments. we hope that our revisions will be qualified for the journal.

Responses to 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 its final acceptance, the author(s) must provide the Signed Informed Consent Form(s) or Document(s) of treatment in Chinese. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor. Please upload the approved grant application form(s) or funding agency copy of any approval document(s)

Response: Thank you for your valuable advices, we have provided the Signed Informed Consent Form(s) in Chinese, re-prepared the figures using PowerPoint, and uploaded the funding agency copy of approval document.

Responses to Reviewer #1

Thank You very much for providing an opportunity to review the manuscript titled "Multidisciplinary non-surgical treatment of advanced periodontitis: A case report". Authors of current case report aimed to evaluate the efficacy of multidisciplinary non-surgical treatment in a patient with chronic periodontitis, malocclusion and dentition defects. There are some concerns and questions:

Q1: In the Introduction authors presented information about prosthetic treatment of patients with periodontal pathology, however some basic

information is missing here (some specific and appropriate studies concerning to prosthetic treatment of patients with periodontal pathology see below).

Response: Thanks for your careful review. We have added the relevant content concerning to prosthetic treatment of patients with periodontal pathology in the Introduction section(page 2, line 26-30).

Q2. In the end of Introduction authors should clearly present the aim of this case report.

Response: Thanks for your valuable advice. We have presented the aim of this case report in the Introduction section(page 3 line 2-5).

Q3. In Case Presentation authors should expand information regarding complaints and symptoms (presence or absence of halitosis, bleeding during tooth brushing, gum tenderness etc.).

Response: Thanks for your valuable suggestions. We have added the regarding information In Case Presentation section(page 4 line 17 line 24-25).

Q4. In my view separate Methodology/Technique section should be added, where authors should present all the examination methods (Florida Probe, periodontal pocket depth measurement, plaque (oral hygiene), bleeding, tooth mobility assessment, X-ray evaluation, etc).

Response: Thank you for your valuable advice. We have added a separate Methodology section concerning all the examination method in revised manuscript (page 5 line 18-32 to page 6 line 1-6).

Q5. In Physical examination authors wrote about Patient consent and Ethical approval. In my view, this information should be presented under new subheading.

Response: Thanks for your valuable suggestions. We have presented the relevant information under new subheading of Patient consent and Ethical approval(page 5, line 4-8) .

Q6. In the Initial periodontal therapy it is written “plaque accumulation markedly decreased from 100 - 17%”. Which index was used to assess plaque accumulation?

Response: Thank you for your careful review. We are very sorry for the negligence of clarifying the index of plaque index(PLI) to assess plaque accumulation. The manuscript was revised accordingly(page 8, line 8-9).

Q7. In the Initial periodontal therapy it was written “PD markedly improved”. What it means? Depth of periodontal pocket can be within normal limits (up to 3mm) because of gingival recession, however for understanding of real condition of periodontium it should be measured from CEJ up to the floor of periodontal pocket (this should be assessed before, during and after treatment to judge about the effectiveness of treatment). Please clarify for a reader.

Response: Thank you for your careful and rigorous review. We are very sorry for this misunderstanding. We intended to express a marked reduction in periodontal pockets while probing. The manuscript was revised accordingly(page 8, line12).

Q8. Under Outcome and Follow up section authors should add appropriate studies, discuss and compare with their own study. Here are some latest studies about prosthetic treatment of patients with periodontal pathology: 1. Avetisyan, A.; Markaryan, M.; Rokaya, D.; Tovani-Palone, M.R.; Zafar, M.S.; Khurshid, Z.; Vardanyan, A.; Heboyan, A. Characteristics of Periodontal Tissues in Prosthetic Treatment with Fixed Dental Prostheses. *Molecules* 2021, 26, 1331. <https://doi.org/10.3390/molecules26051331> 2. Heboyan, A.; Manrikyan, M.; Zafar, M.S.; Rokaya, D.; Nushikyan, R.; Vardanyan, I;

Vardanyan, A.; Khurshid, Z. Bacteriological Evaluation of Gingival Crevicular Fluid in Teeth Restored Using Fixed Dental Prostheses: An In Vivo Study. *Int. J. Mol. Sci.* 2021, 22, 5463. <https://doi.org/10.3390/ijms22115463> 3. Heboyan A, Syed AUY, Rokaya D, Cooper PR, Manrikyan M, Markaryan M. Cytomorphometric Analysis of Inflammation Dynamics in the Periodontium Following the Use of Fixed Dental Prostheses. *Molecules.* 2020; 25(20):4650. <https://doi.org/10.3390/molecules25204650> 4. Heboyan, A.; Manrikyan, M.; Markaryan, M.; Vardanyan, I. Changes in the parameters of gingival crevicular fluid in masticatory function restoration by various prosthodontic constructions. *Int. J. Pharm. Res.* 2020, 12, 2088–2093.

Response: Thank you for offering us useful studies. We have read carefully and cited them in our revised manuscript (page 2, line 28-30; Reference 9-12).

Responses to Reviewer #2

Q1. Please replace the words chronic periodontitis and advanced periodontitis in the abstract section by the grading and staging new classification system

Response: Thank you for your valuable suggestions. We have revised our manuscript accordingly (page 2, line 6 line 22 line 30).

Q2. Initial periodontal therapy was based on mechanical removal of bacterial plaque via non- surgical treatment, with standardized supra- and subgingival scaling plus root planning (SRP). Please define the instruments and methods of making conventional non surgical therapy and if you did only root debridement or vigorous root planning Please define the commercial name and characteristics of the endoscope and how much the user is competent in using the device.

Response: Thank you for your careful and rigorous review. Generally, We performed standardized supra- and subgingival scaling plus root planning (SRP) with Gracey scaler and periodontal ultrasonic therapeutic apparatus. The commercial name of endoscope is perioscopy. Perioscopy is a minimally invasive dental endoscope that allows clinicians and hygienists to see magnified details of tooth anatomy below the gum line which help to diagnose and treat periodontal disease. For qualified periodontal specialists, after professional training from periodontal endoscopic products company, and after training by simulation head model, the product can be used clinically. We have revised our manuscript accordingly (page 2, line 11-13).

Q3. reinforcement of oral hygiene processes. Please mention a detailed instructions

Response: Thanks for your reasonable advice. We have provided a detailed instructions in Initial periodontal therapy section in revised manuscript (page 8, line 4-6).

Q4. Orthodontic treatment was therefore initiated, with thorough examination and risk assessment using a Florida Probe. you have mentioned that some teeth are extremely mobile and others showed more than one mobility score , I have concerns about orthodontic therapy in the presence of such situation, specially you did not mention the labial plate thickness of affected teeth which could be very thin or lacking , please explain Please mention the linear measurements regarding hard tissue parameters specially those related to the teeth with extreme mobility

Response: Thank you for your careful review and we are sorry for negligence of mentioning the hard tissue measurements. It is very true as you pointed that the uncontrolled tooth mobility might bring risk for orthodontic therapy.

In our case, a stable periodontal condition was achieved after systematic periodontal therapy despite some teeth remaining mobile. We consulted the orthodontist for a critical evaluation, which did not require tooth movement to the labial- buccal side during orthodontics and therefore did not further increase the risk of loosening but instead may be beneficial for stabilizing the loosening after improving the occlusal relationship. Thanks again for your advice and the manuscript was revised accordingly in Orthodontic treatment section(page 12 line 8-12).

Q5. For example, Barros et al. showed that non-surgical periodontal treatment alone could result in improvements in alveolar bone density[16], while a recent review demonstrated no significant difference in clinical outcomes between surgical and non-surgical periodontal therapy[15]. Please refer to systematic reviews related to the subject.

Response: Thank you for your rigorous review and we are sorry for this misunderstanding. We have delete the inappropriate content in revised manuscript(page 17 line 1-3).

Responses to Reviewer #3

Q1: At the Material and Methods section there is a description of the physical (clinical) examination which has diagnosed the condition(s) of the patient, but there is also another part named Final Diagnosis, which describes only the periodontal condition, not orthodontic.

Response: Thank you for your conscientious review. We are also very sorry for the incomplete diagnosis in FINAL DIAGNOSIS section and have added the orthodontic diagnosis in revised manuscript (page 6 line 10-11).

Q2. Either the Final Diagnosis should be removed, or add other diagnoses to this section. Anyway, keeping both of these sounds like repetition of the same facts.

Response: Thank you for your thoughtful advice. The FINAL DIAGNOSIS section were fulfilled according to your suggestions in our revised manuscript(page 6 line 8-11).

Q3. Devices used in this case should be identified with their manufacturer, describing their model and place of production, e.g. periodontal endoscope, Florida Probe.

Response: Thank you for your useful advice. We have added the detailed information of devices in our revised paper(page 2 line 12 13 16).

Q4. Figures are not named, except fig 2.

Response: Thank you for your careful review of our manuscript. We are very sorry for the lack of names of Figures and have added them in our revised paper. (page 6 line 17, page 9 line 20, page 9 line 2, page 10 line 2, page 11 line 3, page 13 line 2, page 14 line 8, page 15 line 2, page 16 line 1).

Q5. What mobility index was used to determine "extremely loose" 31 and 41 teeth or mobility \geq I°.

Response: Thank you for your careful review. The Tooth mobility assessment was added in our revised paper(page 5 line 30-32 to page 6 line 1-2).

Q6. Please explain how "plaque-positive" tooth was evaluated (visually, using probe, using disclosing agents...).

Response: Thank you for your rigorous review. The Oral hygiene (plaque assessment) was evaluated visually and by probing. Relevant content was added in our revised paper (page 5 line 20-21).

Q7. Conclusion should be rephrased (it shouldn't start with "This case report...")

Response: Thank you for your reasonable suggestion and we have changed the Conclusion section in our revised paper(page 18 line 19-23).

We tried our best to improve the manuscript and made some changes in the manuscript. We appreciate your work sincerely and hope that our revisions will be qualified for the journal.

We look forward to hearing from you soon and would be glad to respond to any further questions and comments.

Best Regards,
Baochun Tan

Reference: