Dear editors and reviewers of the World Journal of Clinical Cases,

Thank you very much for your letter and for the reviewers’ comments on our manuscript entitled “Multi-disciplinary Treatment of Maxillofacial Skeletal Deformities by Orthognathic Surgery Combined with Periodontal Phenotype Modification: A Case Report”. We have carefully reviewed the comments and have revised the manuscript accordingly. Our responses are given in a point-by-point manner below.

Responses to Reviewer #1

Comments to authors:

1. Please correct line 154: Figure 4. Gingiva augmentation. Mucograft was transplanted to #33-#43. A, Before the
   Response: Thank you for careful review. The spelling error has been corrected.

   Response: Thank you for the suggestion. We have rephrased the paragraph in the revised manuscript. What we are trying to elucidate is that the patient was facing high incidence of more advanced bone dehiscence and gingiva recession in orthodontic decompensation because of combined factors, including labial movement and procline of mandibular incisors, the extent of compensation and thin periodontal biotype (with existed bone dehiscence) [1]. According to studies, evidence support periodontal phenotype modification can help maintain facial bone thickness to withstand tooth movement and potentially expand the limits of tooth movement [1]. Besides, we focused not only the bone morphology but also the change of soft tissue, including periodontal attachment and the position of gingival margin.
   We have carefully read the study mentioned in your comments. It is an interesting study that investigated bone defect and transversal tooth movement in patients after orthodontic treatment with or without piezocision. We understand the outcomes of studies can be inconsistent due to heterogeneity of case inclusion criteria, surgery methods, procedures and so on. Thus, we cited the article and specified it in the manuscript.

Responses to Reviewer #2

Comments to authors:
1. The manuscript seems bit lengthy for a case report and should be shortened. First paragraph in the introduction section seems irrelevant and can be deleted.
  
  **Response:** Thank you for comments. We have shortened the first paragraph by deleting less relevant contents.

2. Table describing treatment timeline can also be deleted and should be described in words while describing case report.
  
  **Response:** Thank you for the suggestion. Because the timeline (figure/table) is required in CARE checklist, we keep the table following the publisher’s guideline.

3. Line 151 ‘transplant’ should be replaced with graft. Line 198 ‘BSSRO’ should be replaced with bilateral sagittal split osteotomy.
  
  **Response:** The modifications are made in the revised manuscript.

4. While writing materials used to treat the case, city and country of the manufacturer should also be mentioned within brackets.
  
  **Response:** The information is added to the manuscript.

**Responses to Reviewer #3**

Comments to authors:

In the manuscript entitled: “Multi-disciplinary Treatment of Maxillofacial Skeletal Deformities by Orthognathic Surgery Combined with Periodontal Phenotype Modification: A Case Report”, the authors examined comprehensive management of a patient with skeletal Class III malocclusion and facial asymmetry. The authors found that the case highlighted the importance and benefits of periodontal phenotype modification, which can effectively prevent serious complications such as anterior attachment loss and compromise to the treatment outcome. Corticotomy combined bone augmentation with or without gingiva augmentation, can not only increase the safety of treatment, but also stretch the limits of deformity correction. The authors concluded that in cases with dentofacial deformities, it is important to correctly recognize skeletal discrepancies prior to treatment. Additionally, irrespective of whether the patients were treated with orthodontic camouflage or the orthodontic-orthognathic approach, it is important to consider the periodontal phenotype. In select cases, corticotomy combined with soft and hard tissues augmentation could help overcome some of the limits of the treatment while resulting in optimal outcomes. Major comments: In general, the idea and innovation of this study, regards Maxillofacial Skeletal Deformities by Orthognathic Surgery Combined with Periodontal Phenotype Modification is interesting, because the role these aspects in medicine and dentistry are validated but further studies on this topic could be an innovative issue in this field could be open a creative matter of debate in literature by adding new information. Moreover, there are few reports in the literature that studied this interesting topic with this kind of study design. The study was well conducted by the authors; However, there are some concerns to revise that are described below.

1. The introduction section resumes the existing knowledge regarding the important factor linked with craniofacial malocclusions. However, as the importance of the topic, the reviewer strongly recommends, before a further re-evaluation of the manuscript, to update the literature through read, discuss and must cites in the references with great

Response: We appreciated your suggestions, and we agree that it is an intriguing clinical question about the relationship between occlusion and temporomandibular disorders (TMD). We carefully read all 3 listed articles and find them very interesting. Thus, studies that are relevant to our case report are cited in the manuscript. Also, we have searched and read studies of occlusion, orthodontics and TMD as suggested. Studies found some significant associations between occlusal variables and TMD have been occasionally described, but they are not consistent across studies [2]. With regard to the role of orthodontic treatment, the correlation of orthodontic treatment and TMD is inconclusive [3]. In the case report, our patient didn’t show significant symptoms of TMD and didn’t receive any treatment of TMJ. However, considering the multifactorial and unclear etiology of TMD, it is necessary to monitor the TMJ function during and after orthodontic treatment [3]. We have supplemented some content about TMJ (highlighted) in the case presentation as well as in discussion.

2. The authors should be better specified, at the end of the introduction section, the rational of the study and the aim of the study.

Response: The rationale and aim of the case report is specified at the end of the introduction.

3. In the central section, should better dentofacial characteristics.

Response: Thank you for comments. More description has been added to the manuscript.

4. The discussion section appears well organized with the relevant paper that support the conclusions, even if the authors should better discuss the relationship malocclusions, TMJ dysfunctions and Tooth inclusions as causes of malocclusions. The conclusion should reinforce in light of the discussions.

Response: Thank you for the suggestions. We understand the complication and significance of TMJ dysfunction, malocclusion and tooth inclusions. Although our patient didn’t show significant clinical symptoms of TMD, and accordingly didn’t receive treatment with regard to TMJ. However, we agree that it’s necessary to closely monitor the TMJ function in long-term follow-up. And it was added to the discussion part.

5. Abstract: Better formulate the abstract section by better describing the aim of the study

Response: The aim of the study was described and highlighted in the abstract.

6. Introduction: - Please refer to major comments.

Response: The introduction has been revised as mentioned.

7. Discussion - Please add a specific sentence that clarifies the results obtained in the first part of the discussion.
Response: It has been highlighted in the manuscript.

8. Page 20 last paragraph: Please reorganize this paragraph that is not clear
   Response: It seems to be confusing because there is no page 20 in our manuscript. It will be appreciated if to be further elucidated.

Responses to Reviewer #4
The paper is interesting and may be publisher in the World Journal of Clinical Cases.

Responses to Reviewer #5
Congratulations. The manuscript is very well written and describes a very interesting clinical case. Minor suggestions are given to improve the text.
1. Please, keywords must be extracted from MeSH PubMed.
   Response: We replaced some keywords as your suggestions. For the rest of the keyword, such as Case Report, is kept as the publisher’s requirement.
2. You must mention the place where the patient was treated. For example: "Woman, 22 years old, attended the Periodontics Service, Nanjing Stomatological Hospital, .............
   The main complaint reported by the patient was ... I suggest that you combine this information into a single section (Past and Current Medical History).
   Response: We added more information as you suggested. The format of each section follows the requirement of publisher’s guideline.
3. Mention the name of some of the tests performed.
   Response: The names of tests are mentioned.

Responses to Reviewer #6
Please Do the minor changes as advised.
Response: Thank you. The changes have been made in the manuscript. However, the patient received previous treatment (described in history) at other clinics, and none of the medical documents are kept. The missing information would not significantly affect the main conclusion of the study.

References: