Response to Comments/Suggestions from Reviewer 1 and 2

Dear reviewers

We are truly grateful for your kind and helpful comments, which were very supportive of further improving this manuscript. You will find our point-by-point responses to your comments/ questions as below.

Sincerely yours,

The corresponding author Prof. Haipeng Sun

Reviewer #1:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors: This is a good report. ①Please add more images. ②Please elaborate heavily on the diagnosis, treatment, and follow-up. ③In the introduction, elaborate on the rarity of this condition. ④Delete any statements regarding conclusions because a case report cannot convey any. ⑤Please tone down the bold sentences about the significance of this case (except the ones about its rarity).

①Please add more images.

Response: Thanks for your pertinent opinions and comments. We recorded lots of images but were limited by the photo quality, we only picked up the best photos and used them in this manuscript. We will pay more attention to the quality and quantity of photos in future research. However, we made a significant improvement to our image, and now they look much clear than before and we added a new table to the manuscript as well. We hope this modification could satisfy you.

⁽²⁾Please elaborate heavily on the diagnosis, treatment, and follow-up. **Response :** Thank you, followed your advice, we focused on these topics and give more detailed explanation.

③In the introduction, elaborate on the rarity of this condition.

Response : Thanks for your comment. we had added more information to the introduction from line 64 to74.

(4) Delete any statements regarding conclusions because a case report cannot convey any. **Response :** Thanks, based on your opinion, we had removed the conclusion section.

⁽⁵⁾Please tone down the bold sentences about the significance of this case (except the ones about its rarity).

Response : Based on your advice, we modified the tone throughout the manuscript thoroughly.

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors: ①Title: the title reflects the main subject/hypothesis of the manuscript. ②Abstract: the abstract summarizes and reflects the work described in the manuscript; however, it is recommended to detail the medications prescribed and provide conclusions based on the results. For example, the presence of the fissure in the molar is an important detail that must be highlighted in the results and reflected in the

conclusions. ③Key Words: the keywords reflect the focus of the manuscript; however, most of them are not MeSH terms. ④Background: the manuscript adequately describes the background, and presents the status and significance of the study; however, a brief description of case management (references 1-3; page 2, line 45) would be pertinent. On the other hand, lines 48 and 49 should be removed because they become part of the methods and are mentioned there. Moreover, at the end of the introduction it is indicated "prevention of this SURGICAL COMPLICATION". This must be clarified. ⑤ Methods. The approval number of the bioethics committee must be added. Case Report. Line 63. Because periodontal pocket depth can be confusing, it is recommended to describe it as gingival sulcus depth in the absence of periodontitis. This should be adjusted throughout the manuscript. 6 All figures need to be improved. In particular, all elements that are not necessary should be eliminated (numbers, letters, lips, desks, retractors, other people, the floor, etc.). Page 3, line 90. The legend of the figures indicates the dimension in millimeters of the lateral buccal gingival sulcus. The most appropriate would be to present the dimension of the gingival sulcus in the 6 places per tooth that are generally part of a correct gingival evaluation. ⑦Discussion. Page 6, lines 167-168. The hypotheses that support a greater presence of emphysema in women should be indicated. Page 6, lines 168-171. How is this sentence related to what was observed in the present case? It seems that reference 10 is closely related to the present case. It would be appropriate to make a contrast with that case. (a) Conclusions. Lines 200-203. They seem like recommendations that can be placed at the end of the discussion. Reference 11 is extremely old.

①Title: the title reflects the main subject/hypothesis of the manuscript. **Response:** We appreciate your comment very much.

②Abstract: the abstract summarizes and reflects the work described in the manuscript; however, it is recommended to detail the medications prescribed and provide conclusions based on the results. For example, the presence of the fissure in the molar is an important detail that must be highlighted in the results and reflected in the conclusions.

Response: Thank you for your comments, followed your comments, we modified our abstract, and you could find them with highlight from the manuscript.

③Key Words: the keywords reflect the focus of the manuscript; however, most of them are not MeSH terms.

Response: Based on your advice, we modified our KEYWORDS according to the style of MeSH terms.

(4)Background: the manuscript adequately describes the background, and presents the status and significance of the study; however, a brief description of case management (references 1-3; page 2, line 45) would be pertinent. On the other hand, lines 48 and 49 should be removed because they become part of the methods and are mentioned there. Moreover, at the end of the introduction it is indicated "prevention of this SURGICAL COMPLICATION". This must be clarified.

Response: Thank you for your wisdom advice, we add a brief description of case management in the introduction line 54 to 63. Meanwhile, we remove the sentence you mentioned and modify the expression in introduction section. you could find the change from page 2 line 54 to 80.

⁽⁵⁾Methods: The approval number of the bioethics committee must be added. Case Report. Line 63. Because periodontal pocket depth can be confusing, it is recommended to describe it as gingival sulcus depth in the absence of periodontitis. This should be adjusted throughout the manuscript.

Response: Thanks for your professional advices, we had added the number to the manuscript, line 83. We also adopted your suggestion, changed all periodontal pocket depth to gingival sulcus depth throughout the manuscript.

⁽⁶⁾All figures need to be improved. In particular, all elements that are not necessary should be eliminated (numbers, letters, lips, desks, retractors, other people, the floor, etc.). Page 3, line 90. The legend of the figures indicates the dimension in millimeters of the lateral buccal gingival sulcus. The most appropriate would be to present the dimension of the gingival sulcus in the 6 places per tooth that are generally part of a correct gingival evaluation.

Response: Thanks for your suggestions, we made the appropriate modifications to almost all the figures based on your comments. With respect to the depth of the gingival sulcus measurement, we indeed assessed all 6 places around the tooth, but only the buccual lateral photos were taken due to the improved visibility in that area. We also add a new table to present the probing results to provide a more comprehensive understanding of the data.

⑦Discussion. Page 6, lines 167-168. The hypotheses that support a greater presence of emphysema in women should be indicated. Page 6, lines 168-171. How is this sentence related to what was observed in the present case? It seems that reference 10 is closely related to the present case. It would be appropriate to make a contrast with that case.

Response: Thank you for your comments, based on your suggestion we modified the expression to this "As stated by Fasoulas et al. [13], subcutaneous emphysema is almost twice as common in females than males. In their systematic review, emphysema was mainly reported in females (39/65) rather than males (20/65) and the age of the patients ranged from 18 to 63 years (mean = 38 years). In another study, Jeong and their team indicated that subcu-taneous emphysema originating from maxillary teeth (n=8; 66.7%) was two times more common than that originating from mandibular teeth (n=4; 33.3%), meanwhile subcu-taneous emphysema was more common in posterior teeth (91.7%, n=11) than in anterior teeth (8.3%, n=1). Approximately 18% (2 of 11 patients) of subcutaneous emphysema cases can be attributed to crown preparation [11]. Nadarajah reported a serious and huge cervical subcutaneous emphysema and pneumomediastinum occurring after extraction of a mandibular right molar by using an air

turbine handpiece [10]. Although there are no documented cases in the literature, it is important for dental professionals to be aware that cervical subcutaneous emphysema caused by dental crown preparation can also poten-tially lead to very serious complications. Rapid diagnosis, management is critical for both patient and dentist."

I agree with your opinion about the description of 168-171, therefore, we deleted these sentences and replaced by a new paragraph to explain the incidence of subcutaneous emphysema occurred in different dental operation. We discussed the reference 10, make a contrast in the same paragraph as well. You could also find them in page 8, line 254-268.

⁽⁸⁾Conclusions. Lines 200-203. They seem like recommendations that can be placed at the end of the discussion. Reference 11 is extremely old.

Response: Thank you for your valuable suggestion. We have implemented it by incorporating the sentence you proposed at the end of the discussion. We also adopted another reviewer's advice to delete the section of the conclusion and made this report more concise. We changed the reference 11 to a new one as well.

Last but not least, thanks for your questions and suggestions sincerely, they are critical and helpful for our manuscript. We hope our answer could satisfy your review, thank you very much.