

Author's Point-by-Point Response to Reviewers

Dear Editor:

We thank you and the reviewers for your constructive review of our work, as well as the opportunity to submit a revised manuscript. Your suggestions are extremely valuable and greatly appreciated. We have made every effort to address your comments, which has been summarised here and incorporated and highlighted in red in the revised manuscript.

Referee(s) comments to authors:

Reviewer #1: Comments to the manuscript nu76443 General comments This case report represents an interesting clinical case of supernumerary teeth and giving good diagnostic tool for such cases.

1. Although the case is rare, it is missing the final and appropriate solution for such problem in my opinion. As the contentious presence of the paramolars will lead eventually to endodontic treatment for the first molar and may be to the second molar due to contentious food impaction in the narrow space between Paramolars crown and first and second molar. In my opinion authors could have followed their endodontic treatment by complete resection of paramolars from the second molar especially with the confirmation of complete canals separation by the 3D digital model created.

A: We truly appreciate the reviewer's advice. The digital model of the local anatomy revealed that the roots of the two supernumerary teeth were fused with the mesial buccal roots of the second molar, and the root canal systems of the two supernumerary teeth intersected the middle 1/3 of the root and apical area. Although the paramolars and the second molar have independent root canal systems, performing a complete resection of the paramolars from the second molar necessitates a traumatic periodontal flap. Additionally, after the paramolars undergo a hemisection, the procedure may cause buccal dentin and cementum to become exposed, which may aggravate temperature sensitivity and even cause pulpitis. Because the fused tooth was in the area of the posterior teeth, the patient did not need to consider aesthetics. In addition, the patient has a good awareness of oral hygiene. Therefore, after negotiating the treatment plan with the patient, the patient preferred the conservative treatment to resolve the existing

symptoms. Furthermore, we used resin to fill the region between the paramolars and the second molar, which can effectively solve the problem of food impaction.

We have added this in the Discussion.

2. Abstract The abstract state clearly the objectives, methodology, and results of the case report. Despite that, there is one contradiction between the throbbing pain (sever strong pain) mentioned in the abstract section and pain description in the methodology section. (Pain upon biting and cold sensitivity for one month). Please use the more reliable expression throughout the whole manuscript.

A: We apologise for the inappropriate pain description. As the chief complaint and history of present illness, the patient felt pain in his maxillary left molar while chewing for approximately 1 month. The tooth was sensitive to cold. Before this time, the tooth did not exhibit spontaneous pain. We have amended the pain description in the Abstract and Discussion.

3. Introduction Enough and sufficient as for a case report. Methodology The case description part missing the complete and sufficient clinical examination for the case and measurement the oral hygiene level (OHIS) of the patient as well as the (DMF) of the patient representation on dental chart. Also, it missing measuring the level of pain on any pain measuring tool as Visual Analog Scale which in my opinion is very important to confirm the success of the treatment. authors have to provide readings for the pulp viability test for the affected tooth and the control teeth comparable to it.

A: We have added the measurement of Oral hygiene index-simplified (OHIS), Decayed Missing Filled-Index (DMF-Index), Visual Analog Scale (VAS), and the readings for the pulp viability test in the case presentation.

4. Results The results missed serial follow up radiographs and the measurement of the decrease the periapical lesion across time to confirm successful treatment. Additionally, it missing the qualitative measuring of pain reduction across time using VAS.

A: We have added the measurement of VAS and the serial follow up radiographs in the results section.

5. Discussion The discussion is well written although the first section could be summarized and be more concise. The authors should mention any study limitations.

A: We have improved the discussion section and added the study limitations.

6. References If possible, authors should replace the old references as ref. Nu 15,2,3,13 with other new and recent ones. Figures Authors need to replace all the cone cut periapical radiograph with a better one.

A: We have replaced the old references with the recent ones. We have replaced the cone cut periapical radiograph with a better one.

7. Authors need to provide a postoperative cone beam at the day of obturation and at least another one at 18 month follow up period to detect the periapical lesion condition and confirm the excellent 3D root canal restoration.

A: We truly appreciate the reviewer's advice. According to the guidelines on "AAE/AAOMR Joint Position Statement-Use of Cone Beam Computed Tomography in Endodontics"(2015/2016 Update) from American Association of Endodontists (AAE) (<https://f3f142zs0k2w1kg84k5p9i1o-wpengine.netdna-ssl.com/specialty/wp-content/uploads/sites/2/2017/06/conebeamstatement.pdf>), in the absence of clinical signs or symptoms, intraoral radiographs should be considered the imaging modality of choice for the evaluation of healing following nonsurgical and surgical endodontic treatment (from Recommendation 13). Additionally, because of no clinical symptoms, the patient was reluctant to take CBCT again. We have taken the intraoral radiographs at 6-, 12-, 18-, 24-month follow ups, which revealed good treatment outcomes. We have added the relevant X-rays in the results section.

Reviewer #2: The paper is good.

A: Thank the reviewer for your constructive review of our work. We have polished the language in the revised manuscript.

Reviewer #3: In the present case report, the authors describe the diagnostic and treatment of a fused second maxillary molar and two paramolars using the CBCT technology. The accurate 3D imaging of the teeth and surrounding bone allow for a precise diagnosis and treatment planning, thus providing a minimally invasive approach

for adequate endodontic treatment. Endodontic treatment was performed only in the isthmus (infected region) formed at the fusion joint. Preservation of the pulp vitality of the molar and paramolars was maintained. Well done.

A: Thank the reviewer for your constructive review of our work.

(1) Science editor:

This is a simple case report of a patient with fused molar with paramolars. The case has been well treated and the treatment well illustrated. Yet before bringing this manuscript forward to publication, there are some issues raised by the reviewer that must be addressed by the authors.

1. There was description of throbbing pain in the Abstract and also the discussion, but never mentioned in the case presentation.

A: We apologise for the inappropriate pain description. As the chief complaint and history of present illness, the patient felt pain in his maxillary left molar while chewing for approximately 1 month. The tooth was sensitive to cold. Before this time, the tooth did not exhibit spontaneous pain. We have amended the pain description in the Abstract and Discussion.

2. There was no communication between the root canals of the molar proper and the paramolars. So, another treatment option would be resection of the paramolars and assisted healing by guided tissue regeneration. The authors need to discuss pros and cons of various options and factors leading to the final treatment plan.

A: We truly appreciate the reviewer's advice. The digital model of the local anatomy revealed that the roots of the two supernumerary teeth were fused with the mesial buccal roots of the second molar, and the root canal systems of the two supernumerary teeth intersected the middle 1/3 of the root and apical area. Although the paramolars and the second molar have independent root canal systems, performing a complete resection of the paramolars from the second molar necessitates a traumatic periodontal flap. Additionally, after the paramolars undergo a hemisection, the procedure may cause buccal dentin and cementum to become exposed, which may aggravate temperature sensitivity and even cause pulpitis. Because the fused tooth was in the area of the

posterior teeth, the patient did not need to consider aesthetics. In addition, the patient has a good awareness of oral hygiene. Therefore, after negotiating the treatment plan with the patient, the patient preferred the conservative treatment to resolve the existing symptoms. Furthermore, we used resin to fill the region between the paramolars and the second molar, which can effectively solve the problem of food impaction. We have added this in the Discussion.

(2) 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 Consent for Treatment Form(s) or Document(s). Before final acceptance, uniform presentation should be used for figures showing the same or similar contents; for example, "Figure 1 Pathological changes of atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; F: ...; G: ...". 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. In order to respect and protect the author's intellectual property rights and prevent others from misappropriating figures without the author's authorization or abusing figures without indicating the source, we will indicate the author's copyright for figures originally generated by the author, and if the author has used a figure published elsewhere or that is copyrighted, the author needs to be authorized by the previous publisher or the copyright holder and/or indicate the reference source and copyrights. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2022.

Please upload the approved grant application form(s) or funding agency copy of any approval document(s).

A: [We have provided the relevant documents as required.](#)