**Peer Review File**

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Reviewer A

The cases are well demonstrated. Logic of the study is good to understand. One thing that is needed is to add postoperative course of the final case. If applicable, please show the long term results of the indicated case.

Thank you, we have added some details regarding the patients post operative course. All three cases were treated in late 2020 so have yet to reach a full year of post operative evaluation so this long term results are not yet reportable. From what we have seen with these three patients, there are no recurrences and final neurosensory results are not yet seen. We were very happy for fast recovery of our patients post operatively.

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Reviewer B

First of all, I congratulate you for the work done, it appears to be in line with the journal. VSP seems to be on the rise at the present time and papers published in this regard are growing in the scientific literature. Even the iconographic material is important and well documented.

Overall remarks:

1. I suggest that in the final part of the abstract, the sentence “The use of custom surgical guides allows for an accurately placed and conservative osteotomy”, should be changed to “The use of custom surgical guides allows for an more precise and conservative osteotomy” for better understanding.

This has been edited for better reader understanding. Thank you.

2. In the introduction, authors should consider rewriting the following sentence: “Time under general anesthesia and the duration of a surgical procedure should ideally be minimized and can be when procedures are done as minimally invasive without compromising clinical results”

We have revised this sentence as advised..

3. Delete "is" from the sentence “Most importantly, custom surgical guides can play a crucial role in a procedure that is involves vital structures and preservation of these structures may dictate surgical success”

Thank you for this catch. We have removed this superfluous word.

4. In the introduction, the authors comment that in three cases presented, “all workflows followed a similar protocol”. What was the software used for digital planning and guide design? When the intraoral scan was performed, what was the procedure for data overlap? You should consider explaining the computer-aided design (CAD) workflow.

We have expanded on the work flow in the introduction section as well as in the case presentation 1 section, which is highlighted in the manuscript comments. We used Stryker and 3d systems for our surgical guide design. Other manufacturers have capability of making these types of guides, though the material may vary in some capacity. Selection of Stryker was simply surgeons preference in these cases. When implementing a surgical guide for the indications discussed in this manuscript, all that is necessary is presentation of a CT to the company. Inclusion of an intraoral scan may be considered based on surgeon desires/surgical needs/case dependent, as now more explicitly mentioned in the text hopefully. We feel delving any further into the intricacies of CAD workflow begins to veer beyond our intended scope of this manuscript.

5. Regarding the presentation of cases, the first case includes temporary fixation holes to ensure stabilization of the guide. What is the reason for not including them in two other cases?

We have extrapolated as to why case 1 guide design included fixation holes.

6. Are the designed guides capable of controlling the depth of the bur or are they only used to locate and center the surgical area?

The guides discussed in these case reports do not have a depth gauge or guide. The discussion section now brings this to the reader's attention.

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Reviewer C

The report on the use of VSP in order to secure even better treatment of pathology or nerve repair is well taken. However there are some concerns which should be addressed.

In Introduction you are repeating several issues and the introduction could easily be shorten if authors reconsider the messages. The authors seems do not follow common habits in addressing company and manufacturer. –The use of VSP has become common in many treatment modalities hence the Patient Specific Guides / Implants do not belong to new developments. However, in the context authors want to report its use especially the use in nerve repair is well taken. I do think that authors may want to reconsider its use in the treatment of pathology since it is questionable to treat an ameloblastoma, which involves the tissue around the apical part of the teeth. It would be advisable to choose cases which demonstrate resection and reconstruction. The language of the article needs to be reconsidered.

Thank you, we have edited the introduction and feel it is more readable and streamlined. We hope this translates.

We have now included the company and manufacturer of the guides. These guides are not exclusive designs or models to this company and the surgeon should be able to discuss with the representative of the company of their preference.

We understand these cases represent an atypical treatment approach to ameloblastomas. Our intention of this manuscript was to demonstrate unique uses and designs of surgical guides. Custom guides and VSP for resection and reconstruction cases are well documented in the literature. We urged both of these patient's to undergo the more definitive treatment of resection, as documented in the text, however the patient's both expressed they would elect no treatment to resection. It is our hope that readers may decide to implement a guide design of this type for treatment of any benign

pathology that is acceptably treated in a conservative manner. Case selection is definitely key. We do not feel this is an appropriate treatment option for ALL ameloblastomas or aggressive pathological lesions.

Thank you, we are hopeful the revisions we have made throughout the text are helpful.