

DATE : December 2019
Prof. Lian-Sheng Ma
JOURNAL NAME: *World Journal of Clinical Cases*

Dear Prof. Lian-Sheng Ma,

We are grateful for the reviewer comments about our paper submitted to *World Journal of Clinical Cases* (Manuscript NO.: 52827). We have revised the language per the recommendations and made changes to the text. Below is a point-by-point response to comments to improve the manuscript.

Please feel free to contact me if you have any questions or concerns. Sincerely yours,
Ke Liu

We used the Track Changes functionality within Word to 'highlight' changes made to manuscripts in response to feedback. If no revision marks are shown in the draft, double-click the left side bar to open the revision.

Response to Reviewer #1 (Number ID:03727239):

To address your insightful comments, we have responded below:

1. We added the coronal CT reported in the case to Figure 1, and also added Figure 3 to show its histopathological images.
2. The surgical procedure was conventional disinfection and drapes. The inner volume of the inner volume was pulled out and cut out gradually with a vascular clamp. Pulled the fat pad out and designed the adjacent flap to close the wound.
3. The cheek is anatomically composed principally of the buccinator muscle, which consists of three groups of muscle fibers. It has been proposed that a diverticular lesion is caused by a developmental anomaly occurring due to partial dissection along those muscle fibers. In addition, Partial defects of the muscle layer around the diverticulum were also observed during the operation, and the diverticulum was located at the fragile edge of the anatomy of the muscle layer. After the surgery, the patient's symptom of food impaction re- solved and there has been no recurrence to date. We added this part to the part of the discussion.

Response to Reviewer #2 (Number ID:03769068):

To address your insightful comments, we have responded below:

1. We changed the title to "Diverticulum of the buccal mucosa: a case report"
2. We modified the format of Abstract and made it agree with journal rules.
Background: A diverticulum is the medical or biological term for an outpouching of a hollow structure in the body, Especially occur in the digestive system. But it rare occurs in the oral mucosa. Case summary: This report describes a rare case of a diverticulum presenting in the buccal mucosa in a 44-year-old woman which was initially diagnosed in Stomatology Hospital, Wuhan University. We made a diagnosis under the guidance of imaging data and underwent surgical resection. Conclusion: we were able to elucidate that an idiopathic developmental anomaly caused by a buccinator muscle defect was responsible for the development of the

diverticulum in this case.

3. We improved the Introduction as follows: Diverticula of the buccal mucosa are very uncommon. The first report of a diverticulum in the buccal mucosa was described by Bailey as a case of a voluminous diverticulum arising from the buccal sulcus and extending into the neck. Since then, only nine cases have been reported in the literature. Diverticula form from herniation of the mucosa and submucosa through defects in the muscle layers¹. In the published reports, the diverticulum occurs in various kind of organs, including esophagus, stomach, duodenum³, bladder⁵, urethra, vagina, circulatory system, etc²⁻⁶. Here we present a rare case of diverticulum in the oral buccal mucosa, with discussion of the presentation, investigations and management of this case.
4. We also improved the Clinical report, Discussion and Conclusion. We made the necessary additions and deepening, and marked them in red.
5. We made the conclusion relate more intrinsically to the case. In conclusion, this report has described a rare occurrence of a diverticulum of the buccal mucosa. This is the first proven case, and we have provided substantial evidence in the form of clinical, pathological, and radiographic findings. In addition, we were able to elucidate that an idiopathic developmental anomaly caused by a buccinator muscle defect was responsible for the development of the diverticulum in this case.

We have added a Conflict of Interest statement just before the references section in the main document.

We tried our best to improve the manuscript and made some changes in the manuscript. These changes will not influence the content and framework of the paper. We appreciate for Reviewers' warm work earnestly, and hope that the correction will meet with approval.

Once again, thank you very much for your comments and suggestions.

Sincerely yours,
Ke Liu
December 2019