Peer Review File

Article information: https://dx.doi.org/10.21037/fomm-22-51

<mark>Reviewer A</mark>

<u>Comment 1</u>: The article is well structured and presents an interesting case that highlights the importance of analyzing all possible information for the proper diagnosis of lesions that clinically and/or radiographically suggest a lesion distinct from the one histopathologically evidenced.

<u>Reply 1</u>: Thank you for the kind words of encouragement. <u>Changes in the text</u>: Not applicable

<mark>Reviewer B</mark>

Please address the following:

Comment 1: Line 131 - it should be tooth "17" instead of "27"

<u>Reply 1</u>: Apologies for the typing error. The change has been made.

Changes in the text: We have modified the text as advised (see page 5, line 135)

<u>Comment 2</u>: Linguistic verification - in my opinion the language style and syntax can be improved.

<u>Reply 2</u>: Thank you for your valuable input. We will try and improve the language style and syntax in the subsequent publications.

Changes in the text: Not applicable

<mark>Reviewer C</mark>

<u>Comment 1</u>: The article is very well written.

No revision is necessary, article could be accepted without modifications.

<u>Reply 1</u>: Thank you for the encouraging words. Really appreciated.

Changes in the text: Not applicable

<mark>Reviewer D</mark>

<u>Comment 1</u>: You describe a cystic lesion related to a third upper molar in sinus cavity but the aspect in CBCT is not typical at all of a dentigerous cyst (DC) on your caption. Moreover, you don't discuss the role of MRI to establish a preliminary diagnosis of OKC before surgery while much data exists in the literature.

<u>Reply 1</u>: On literature search, we have found that MRI is used as an adjunct tool for assessing the soft tissue involvement in OKCs. We have added the role of MRI in preliminary diagnosis of

OKC in discussion. However, MRI was not performed in our case as CBCT showed better local resolution and was more economically viable for the patient.

<u>Changes in the text</u>: We have added some data on the role of different imaging modalities, including MRI in preliminary diagnosis of OKC under the discussion heading (see page 7, line 185-194)

<u>Comment 2</u>: Your surgical management is well done but you don't have any follow up on this case.

<u>Reply 2</u>: Thank you for pointing it out. Six month follow-up details have now been added under a separate sub-heading.

Changes in the text: We have added follow up data (see page 6, line 161–163)

<u>Comment 3</u>: In clinical practice, it is very common to see OKC associated to an impacted tooth, especially in lower jaw and third molars. So it is quite common to have OKC masquerading DC or vice versa. Histology affords final diagnosis but a biopsy could also be made before deciding the type of treatment like decompression that is not discussed in your paper.

<u>Reply 3</u>: Literature suggests that limited cysts (less than 5 cm) can be managed by primary excision (total cystectomy) [M Aboul Hosn et al, 2019]. In our case, an interdisciplinary team of oral and maxillofacial surgeons, oral and maxillofacial radiologists and oral and maxillofacial pathologists came to a mutual decision that incisional biopsy was not necessary, and a total enucleation was performed.

<u>Changes in the text</u>: Not applicable

<u>Comment 4</u>: Your description and your approach considering that OKC is masquerading a DC in this case is not convincing.

<u>Reply 4</u>: This was an unusual case where the cyst lining was attached to the neck of the tooth clinically and histopathologically mimicking a dentigerous cyst. The accurate diagnosis of an OKC was needed, as OKC has higher recurrence rate. Making the dental scientific community aware of such cases was deemed necessary, which encouraged us to write a case report. <u>Changes in the text</u>: Not applicable.

<mark>Reviewer E</mark>

<u>Comment 1</u>: Discussion into the imaging modalities should be outlined as opposed to referenced as its core to the diagnosis and management- mri and opg do play a role.

<u>Reply 1</u>: Thank you for the valuable suggestion. We have added the role of imaging modalities in diagnosis of OKCs in the discussion section.

<u>Changes in the text</u>: We have added some data on the role of different imaging modalities, including MRI in preliminary diagnosis of OKC under the discussion heading (see page 7, line 185-194)

<u>Comment 2</u>: Surgical excision is mentioned is this endoscopically or caldwell luc? what approaches are available does it offer a better chance of reduced recurrence rates?

<u>Reply 2</u>: Thank you for your input. Surgical removal of the cyst was performed using the Caldwell-Luc procedure. We have now added it under the surgical procedure sub-heading. Discussion on available surgical treatments has also been added.

<u>Changes in the text</u>: We have added the surgical approach (see page 6, line 145). Discussion on the available surgical treatments has also been added (see page 9, line 212-213)

<u>Comment 3</u>: Case discussion flows well and highlights some important points on management but follow up guidelines should be noted are there any on the horizon?

<u>Reply 3</u>: Thank you for pointing it out. Six month follow-up details have now been added under a separate sub-heading.

Changes in the text: We have added follow up data (see page 6, line 161–163)

<mark>Reviewer F</mark>

This is a well written case report of a relatively common entity but provides useful learning points regarding the importance of histopathological examination. My comments are as below:

<u>Comment 1</u>: On line 131, could you clarify the notation system used when describing tooth 27? Using the FDI system this would be the upper left second molar. <u>Reply 1</u>: Apologies for the typing error. The change has been made. <u>Changes in the text</u>: We have modified the text as advised (see page 5, line 135)

<u>Comment 2</u>: On line 196, I think Carnoy's solution has been misspelt. <u>Reply 2</u>: Apologies for the typing error. The change has been made. <u>Changes in the text</u>: We have modified the text as advised (see page 9, line 215)

<u>Comment 3</u>: In the table, please could you state what notation system has been used to describe the impacted teeth.

<u>Reply 3</u>: The FDI system has been used. We have added the notation system in the table. <u>Changes in the text</u>: Changes have been made in the last column of Table 1.

<u>Comment 4</u>: It would be worth considering adding into the introduction that the WHO classification (2017) states that odontogenic keratocysts often present in the posterior mandible and "often surround the crown of a third molar, resulting in an appearance similar to that of a dentigerous cyst", therefore a cyst associated with an impacted tooth is a presentation where odontogenic keratocysts should be considered.

<u>Reply 4</u>: Thank you for the suggestion. We have made the changes as suggested. <u>Changes in the text</u>: We have modified the text as advised (see page 4, line 107-111).

<u>Comment 5</u>: You mention in the literature review section that you searched for Orthokeratinized Odontogenic Keratocyst, but it does not appear to be mentioned in the case reports you identified. In the WHO 2017 classification it is noted that around half of all Orthokeratinized Odontogenic Keratocysts are associated with an impacted tooth, therefore this either needs to be mentioned or this search term removed.

<u>Reply 5</u>: The search term has been removed <u>Changes in the text</u>: The search term has been removed