Re: Byung-Do Lee, Wan Lee, Kyung-Hwan Kwon, Moon-Ki Choi, Eun-Joo Choi and Jung-Hoon Yoon. Glandular odontogenic cyst mimicking ameloblastoma in a 78-year-old female: A case report. Imaging Science in Dentistry 2014; 44(3): 249-52.

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Dear Editor:

The article by Lee et al., “Glandular odontogenic cyst mimicking ameloblastoma in a 78-year-old female: A case report,” caught our attention as we were doing a literature search for rare cases. We read this report with interest and had a stimulating discussion about it. However, while reading the article there were some points that we were not able to clarify for ourselves. We would be very pleased if you could explain these aspects to us.

The title of the article states that the case is about a glandular odontogenic cyst (GOC) mimicking ameloblastoma. The history (slow expansion, no symptoms) and the radiographic appearance of the lesion (lobulated, well-defined margin, erosion and perforation of the lingual cortex, root resorption of the adjacent teeth) may suggest ameloblastoma, but this set of diagnostic factors is not specific to this particular type of lesion. Therefore, we believe this really isn’t a case of “mimicry”. Would it not have been more appropriate to define this lesion as mimicry in a case where there was another feature specific to ameloblastoma?

It is important to note that just over 100 cases of glandular odontogenic cyst have been reported in the English literature.1 The authors stated that because of a lack of information and the rarity of the cyst they missed considering glandular odontogenic cyst during the differential diagnosis. The fact that it is a rare lesion should not mean for it not to be taken into consideration at all. Moreover, the provisional diagnosis for this case could have also been GOC, considering the patient’s age in addition to the features above.

Another point to mention is that the authors refer to the radiographic appearance of multiple foci and the cortical perforation as being helpful in distinguishing the GOC from ameloblastoma. But this radiographic feature also occurs in ameloblastoma,2 so with all due respect, we do not understand how it could be helpful in distinguishing between the two types of jaw lesions radiographically.

As we read the article, we all agreed that it was not very clear when the histopathological examination was performed. It was either done on a biopsy taken before or during the operation or on the gross specimen, but it wasn’t clear which. It is perfectly normal for a provisional diagnosis to be false, but we believe it would have been better if a biopsy were performed before the operation. If a biopsy was performed before surgery, can you clarify to us what biopsy method was used presurgically: a fine-needle aspiration biopsy or an incisional biopsy? Or was a frozen-section examination performed during the operation to decide if a more conservative or a more radical surgical treatment was appropriate? According to a study by Aronovich and Kim, ~90% of benign oral and maxillofacial lesions are correctly diagnosed and treated during surgery by frozen section histopathology, compared to the definitive histopathology done after the operation.3 Lastly, was the gross specimen sent for histopathological examination to confirm the diagnosis?

Some researchers advocate that an ameloblastoma-no matter the type-should be treated radically to prevent recurrences.4 As for this case, it is not clear if the surgery was performed according to the ameloblastoma diagnosis. If that’s the case, could a cyst not be distinguished from an ameloblastoma when the lesion was opened up? Did...
the authors consider the different treatments of these two lesions during the operation?

We will be very thankful if you could give us information about the points discussed above.

References

1. Fowler CB, Brannon RB, Kessler HP, Castle JT, Kahn MA. Glandular odontogenic cyst: analysis of 46 cases with special emphasis on microscopic criteria for diagnosis. Head Neck Pathol 2011; 5: 364-75.

2. White CS, Pharoh MJ. Oral radiology: principles and interpretation. 6th ed. St Louis: Mosby-Elsevier; 2009. p. 373-75.

3. Aronovich S, Kim RY, The sensitivity and specificity of frozen-section histopathology in the management of benign oral and maxillofacial lesions. J Oral Maxillofac Surg 2014; 72: 914-9.

4. Ooi A, Feng J, Tan HK, OngYS. Primary treatment of mandibular ameloblastoma with segmental resection and free fibula reconstruction: achieving satisfactory outcomes with low implant-prosthetic rehabilitation uptake. J Plast Reconstr Aesthet Surg 2014; 67: 498-505.