Reviewer’s report

**Title:** Peripheral Giant Cell Granuloma with Extensive Osseous Prosoplasia, or Hybrid Peripheral Giant Cell Granuloma-Peripheral Ossifying Fibroma: A Case Report

**Version:** 4  
**Date:** 20 November 2014

**Reviewer:** Ibrahim Bello

Which of the following following best describes what type of case report this is?: Other

If other, please specify:

Not sure what classification to give it

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: No

Will the case report make a difference to clinical practice?: No

Is the anonymity of the patient protected?: Yes

Comments to authors:

Although this is a well written case report on a mandibular gingival mass, it is this reviewer’s opinion that lesions like this are not rare in any oral biopsy service although it may be worthwhile(or otherwise too!) to publish them just for the purpose of generating academic discussions. It is generally accepted that pyogenic granuloma, peripheral giant cell granuloma, peripheral ossifying fibroma and fibroma (fibrous nodule) are all reactive in origin and are not tumors. A number of pathologists currently believe that they are in some ways related,
with the genesis believed to be granulation tissue (pyogenic granuloma) which may then take one of different pathways to becoming populated by giant cells (PGCG), fibrous connective tissue (fibroma) or with further osseous metaplasia (POF).

This reviewer has some minor points of disagreement with the authors which it is hoped they can address further in the revision of their manuscript.

1. Is the use if the term prosoplasia justified? This reviewer does not believe so. Prosoplasia has been originally defined as forward differentiation of cells or groups of cells to a higher level of function or organization. It is still not well understood which cells are making mineralized products in this lesion. Even if the latter appellation is accepted, changing from fibroblasts which are able to make collagen to cells which are able to make osseous products is still within the same range of differentiation. This is probably better termed as metaplasia because of functional or reactive needs of the cells, if the term is to be used at all. Moreover, a great number of workers believe that the mineralized products are derived from cells originating in the periodontal ligament. So it is confusing what the term ‘prosoplasia’ is being applied to here.

Most well-known pathologists have always used “osseous metaplasia” for this type of presentation (i.e. if they even consider using the term necessary in the first place) as it would be more defensible even if the nature of the lesions are not completely understood. If the authors feel otherwise, then it will be better to discuss this clearly in their discussion section. They have not been explicit enough about the entity undergoing the osseous prosoplasia.

2. The term “hybrid tumor” used in the abstract is probably more appropriate for the central lesions which are tumors and are frankly quite unrelated to each other histogenetically. For the peripheral lesions, hybrid tumor (or even “hybrid lesion”) is difficult to justify especially when the etiology is basically the same (reactive to some traumatic or irritating factors) and many workers believe these lesions are just different expression of the same process. The picture seen is more of a reflection of a number of factors including patients own physiology, age of the lesion, extent and constancy of irritating factors etc. This reviewer suggests that any allusion to “hybrid tumor” is significantly downplayed or even removed altogether. The authors should not try to fix this lesion like a jig-saw puzzle replica of their reported corresponding “hybrid”central lesions. Again, the authors should provide a convincing reason(s) that this is a hybrid tumor or even lesion than as presently provided.

3. In this reviewer’s opinion, this lesion will be diagnosed by some pathologists based on the authors’ description simply as “peripheral giant cell granuloma with extensive osseous metaplasia” or “peripheral ossifying fibroma with extensive giant cell accumulation” As already conceded by the authors in the manuscript, in lesions like this the dominant portion determines where the pathologic diagnosis goes. This reviewer believes that should be the case as it probably has no bearing whatsoever on the management and prognosis of the lesion.
One of the strength of the manuscript is that it appears to be well written although it appears to stretch the simple towards the complicated.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Declaration of competing interests:**

I declare that i have no competing interests.