Ameloblastoma Variant

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Dear Editor,

Here with, we would like to share with our readers an interesting and rare case of Dentinoameloblastoma. A 75-year-old male patient reported to our hospital with a chief complaint of ulcer in the left lower back region of the jaw for past six months. History revealed that the patient was not suffering from any other medical conditions and was not on any medications. Extra-Oral Examination revealed a swelling of size 2cm x 2cm present in the left lower back region of the mandible. Intra -Oral Examination revealed a solitary well defined ulcer of size measuring 2cm x 2cm in the left retro-molar trigone region, ovoid in shape with erythematous margin [Table/ Fig-1]. Orthopantomogram revealed a well defined multilocular radiolucency on the left side of the mandible involving the coronoid and condylar process exhibiting a classic soap bubble appearance. An incisional biopsy was performed and the tissue was sent for histopathological examination.

Histopathological examination of the tissue with hematoxylin and eosin revealed plexiform strands of odontogenic epithelium lined by tall columnar cells with reversal polarity and presence of stellate reticulum like cells with basal cell hyperplasia interspersed with adundant amounts of an eosinophilic homogenous extracellular material representing dentinoid [Table/Fig-2]. Special stains were performed and this dentinoid material stained positive for van Gieson and Masson's trichrome [Table/Fig-3,4]. A diagnosis of Dentinoameloblastoma was given. The patient was advised radical surgical excision of the lesion but he never reported back to the hospital for further treatment.

Slabbert et al., [1] was the first to technically use the term "Dentinoameloblastoma". Kumar et al., [2] has reported the occurrence of Dentinoameloblastoma with ghost cells in a 45-yearold Indian patient. Dentinoameloblastoma shows only dentinoid deposition without the formation of enamel as it belongs to the group of odontogenic tumours that arise from the odontogenic epithelium without the involvement of the ectomesenchyme. It could be concluded that the ameloblasts present in the tumour induce the formation of the dentinoid material. This theory is also supported by the conclusions of Sonone et al., [3] in his report of adenoid ameloblastoma with dentinoid and ghost cells. As the biological behaviour of Dentinoameloblastoma is similar to that of conventional ameloblastoma it can also be treated in a similar manner as that of a conventional solid ameloblastoma. Wide surgical excision of the tumour including a margin of the apparently healthy bone is the treatment of choice of this rare tumour [1,4].

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[Table/Fig-1]: Intra-oral photograph showing a partially edentulous mandible & a solitary well-defined ulcer in the left retromolar trigone region [Table/Fig-2]: Adundant amounts of an eosinophilic homogenous extracellular material representing dentinoid (H&E X40x) [Table/Fig-3]: Material Stained in Pink (van Gieson X 10x)

[Table/Fig-4]: Dentinoid material stained in blue (Masson trichrome X 40x)

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