

CASE OF HYBRID AMELOBLASTOMA IN A GERIATRIC PATIENT – DIAGNOSTIC WORK UP

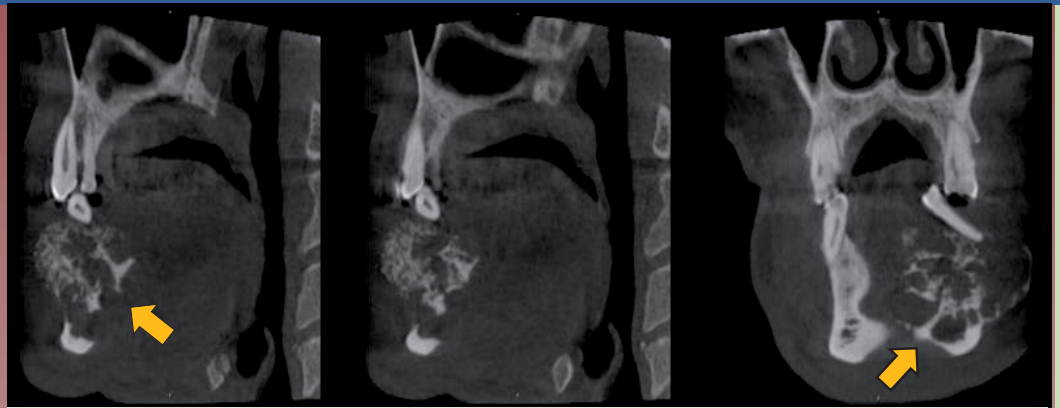


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Introduction

- Ameloblastoma is the most common odontogenic tumour as it accounts for 18% of all odontogenic tumours. [1]
- Its peak incidence is between the third and fourth decade of life with mandible being most commonly affected. [2]
- The term 'hybrid ameloblastoma' was introduced by Waldron and el-Mofty in 1987, which was discovered as a rare histopathological variant including combination of classical follicular or plexiform type along with areas of desmoplastic type. [3]
- Depending on the type of ameloblastoma imaging features vary from unilocular to multilocular lesions, with a characteristic 'soap bubble' or 'honey comb' like appearance. Three dimensional imaging modalities like cone beam computed tomography (CBCT) is considered a standard today due to its superiority over the conventional radiographic techniques.



Bicortical expansion was seen with greater expansion on the buccal side. Internal structure showed a multilocular appearance posteriorly and honey comb appearance in the anterior mandible. Coronal section showed discontinuity in the lingual cortex near the lower border of mandible. Displacement of tooth 35 seen.

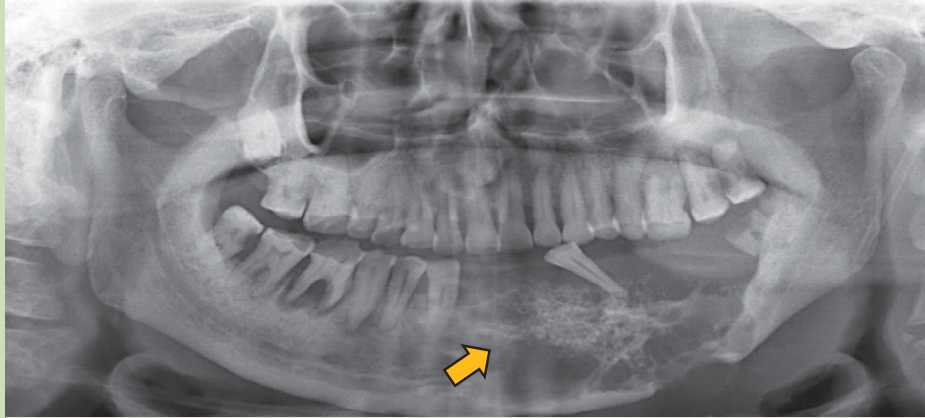
Case Report

A 75-year-old male geriatric patient presented with a swelling on the left side of the lower jaw for past 4 months. Patient gave a history of jaw surgery 12 years back for a similar complaint. Patient had biopsy records giving a previous history of plexiform ameloblastoma which was conservatively managed.

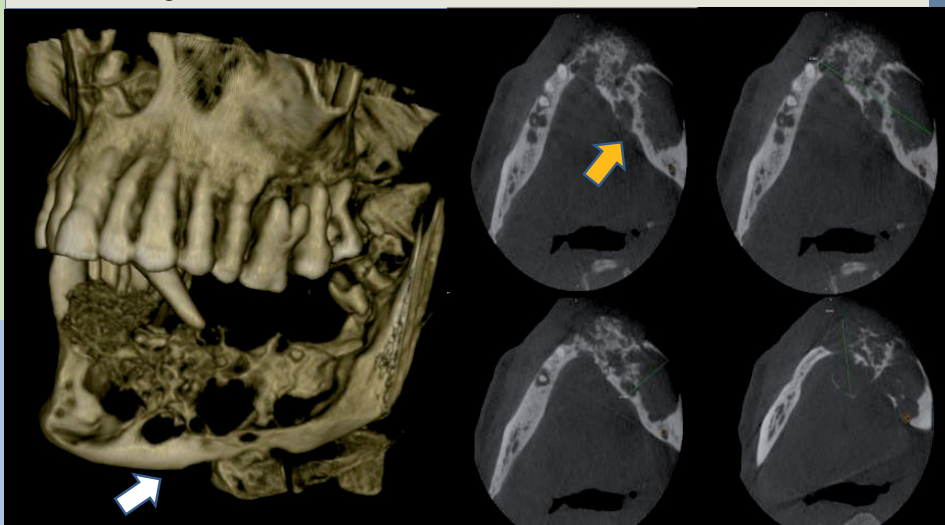


Clinical image showing the swelling in left lower alveolus with displaced tooth 35.

Provisional diagnosis : Recurrent ameloblastoma in the left mandibular region.

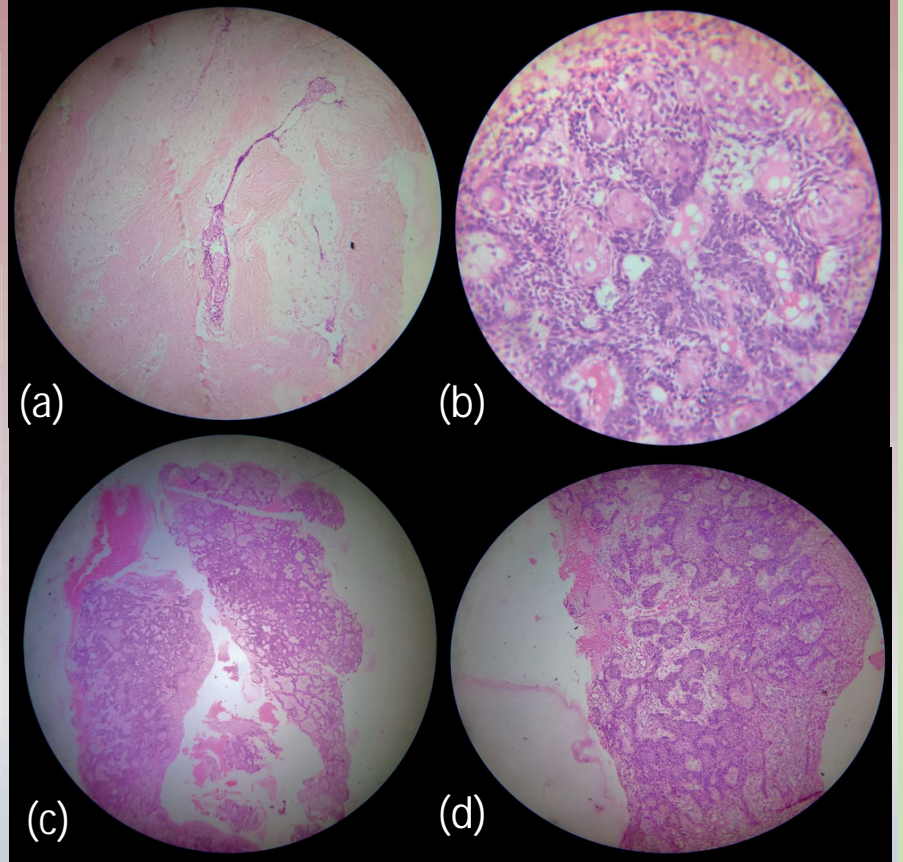


OPG reveals a multilocular radiolucency with mixed density involving left side of the mandible from the tooth 43 region to the distal portion of tooth 38. Internal structure showed a honey comb appearance. Floating tooth appearance in relation to tooth 35. There was involvement of the mandibular canal and discontinuity of the lower border in the left body of mandible region.



CBCT scan : Axial section showed a mixed hypodense and hyperdense lesion in left mandible extending from 43 region to left anterior border of ramus of mandible. It was oval in shape with scalloped margins. It measured 3.03 cm bucco-lingually in the anterior region and 2.27 cm posteriorly.

HISTOPATHOLOGY



(a) Desmoplastic areas (b) Acanthomatous areas
 (c) Plexiform areas (d) Follicular areas

Final diagnosis : Hybrid ameloblastoma in the left mandibular region.

Treatment plan: Surgical resection with 1cm margin of normal bone.

Discussion

- Hybrid ameloblastoma is a rare histopathological variant including combination of classical follicular or plexiform type along with areas of desmoplastic type. As per the current literature, hybrid ameloblastoma accounts for 1.1%–4.3% of the total ameloblastomas. [5]
- Three dimensional modalities like CBCT scan is of higher diagnostic value as compared to 2D imaging modalities as it gives the accurate contour of the lesion, cortical perforation and extension of lesion into soft tissues.
- McIvor stated four radiographic features that are significant in ameloblastoma and these include expansion of cortical plate, presence of corticated scalloped margins, multilocular appearance of lesion, and the resorption of adjacent roots of teeth. [4]
- Since the confirmation of the clinical diagnosis by performing a biopsy is essential, in this case the clinical diagnosis was confirmed by an incisional biopsy following which a surgical treatment plan was carefully formulated.
- The most common treatment modality advocated is resection. Extensive lesions are treated by wide resection with 1 cm margin. But, if the case is not severe, a conservative approach like enucleation and curettage is followed. [6]

References

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