

Diagnostic Enigma of Ameloblastic Carcinoma

CASE PRESENTATION

- 55-year-old female
- Slow growing, small
- Painless growth
- **Site:** Lower anterior region of jaw
- **Duration:** One year
- Pus & blood drainage



EXAMINATION FINDINGS

Extraoral Findings: Symmetrical facial symmetry
Intraoral examination:

- Non tender, firm, well-defined swelling with a smooth surface in the mandibular anterior region measuring 4x5 cm in size.
- Sinus opening draining pus and blood

GROSS SPECIMEN

Multiple soft tissue specimen measuring
 A- 3.5 x 1.5 x 0.9 cm
 B- 2 x 2 x 1.5 cm
 Brownish black in colour, irregular surface and margins.



IMAGING CBCT:

Perforation of cortical plate, destroyed alveolar crest in mandibular anterior region with lateral expansion.

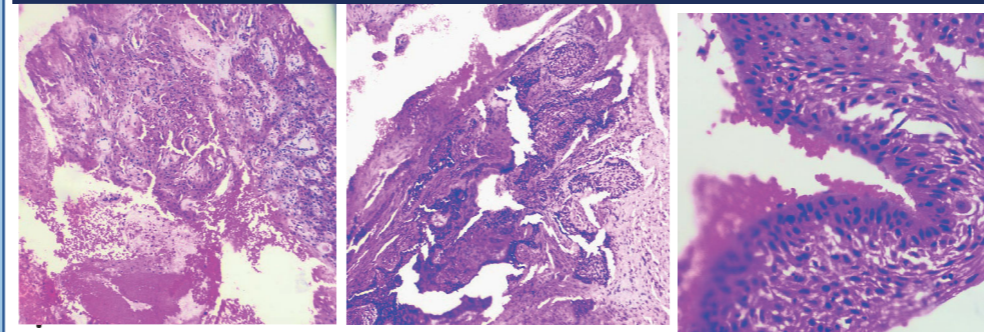
RADIOGRAPHIC FINDINGS



Other investigations

FNAC revealed Benign Cystic Lesion

HISTOPATHOLOGIC FINDINGS

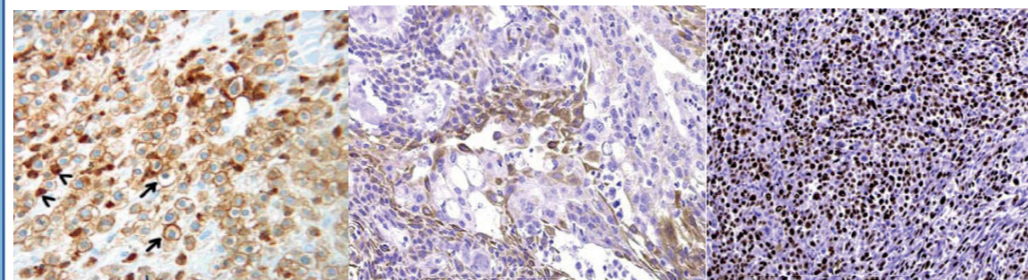


- Areas showed ameloblastoma like islands
- Increased nuclear-to-cytoplasmic ratio, nuclear hyperchromatism, and the presence of mitoses.

IMMUNOHISTOCHEMICAL STUDIES

Positive for CK5, CK18, P40, P16

Negative for CD34, SMA, Desmin, S100



CK 18

P16

P40

MANAGEMENT & PATIENT OUTCOME

- Hemi-mandibulectomy with neck dissection under antibiotic coverage
- Reconstruction with free fibular graft.
- Current status: Radiotherapy and chemotherapy.

Differential Diagnoses

Acanthomatous Ameloblastoma

1° Intra-alveolar Epidermoid Ca

Kerato-amleoblastoma

Basaloid variant of SCC

DISCUSSION

- Rare malignant odontogenic tumour
- De-novo (1°) or by malignant transformation (2°)
- Male-to-female ratio is 1.97:1
- Mandible-to-maxilla ratio is 1.71:1
- 70% involved the posterior portion of jaw
- 5 & 10-year survival proportions: 72.9% and 56.8%
- The recurrence rate after surgery was 28.3%

References:

1. Pindborg JJ. Histological typing of odontogenic tumors, jaw cysts and allied lesions 1971
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3. Regezi JA et al Odontogenic tumors: analysis of 706 cases. J Oral Surg. 1978
4. Slootweg PJ et al Malignant ameloblastoma or ameloblastic carcinoma. OOO 1984