



AMELOBLASTOMA OF MANDIBLE

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**ABSTRACT** Ameloblastoma is a disease of the jaw which involves abnormal tissue growth. The tumors or cysts are usually benign but aggressive. It may also involve tissue near the jaws, such as around the sinuses and eye sockets. As the involved tissues mainly give rise to the teeth, it commonly causes facial distortion. Malignancy and metastasis are uncommon.

**KEYWORDS :** Mandible, Ameloblastoma

**INTRODUCTION:**

- Ameloblastoma is a benign odontogenic tumor generally present in the jaw bone. The tumor originates from the residual epithelium of the tooth germ, epithelium of odontogenic cysts stratified squamous epithelium and epithelium of the enamel organ.
- It represents approximately 1% of oral tumors. About 80% of ameloblastomas occur in the mandible mainly the third molar region and the remaining 20% in the upper jaw. Ameloblastoma clinically appears as an aggressive odontogenic tumor, often asymptomatic and slow-growing, with no evidence of swelling. Male: Female ratio is 1:1. Its incidence was 0.6 cases/million, and of 0.31 cases/million in a white population of South Africa.
- Ameloblastoma accounted for 60.3% of all odontogenic tumors in Indian population, with a mean age of presentation of 30.2 years. A slight male predilection and major occurrence in the mandibular molar-ramus area were elicited. They are classified as unicystic, multicystic or solid, extra osseous/peripheral and desmoplastic ameloblastoma. 86% of cases are multicystic.

**Case-report:**

A 40 year old male patient was referred for CT scan mandible for a swelling at the symphyseal region of mandible since 1 year.

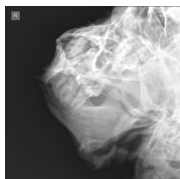
Patient underwent surgery for dentigerous cyst 2 years back. Patient is a known smoker and alcoholic since many years. There was no history of discharge.

**Histopathology Report:**

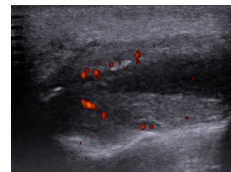
The hematoxylin and eosin stained histopathological sections of the given specimen shows cystic lining epithelium with underlying connective tissue wall. The cystic lining exhibits ameloblastomatous features such as well polarized palisading basal layer with hyperchromatic nuclei.

Suprabasal cells are loosely arranged and resembles stellate reticulum like cells are seen. The connective tissue shows numerous odontogenic epithelium arranged in form of the strands and follicles.

**X-Ray:** It shows a lytic lesion at the alveolar process and symphyseal region of the mandible.



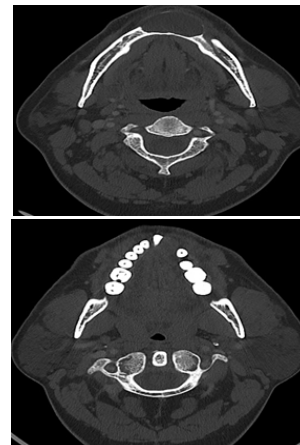
**USG Mandible:** It reveals a hypoechoic lesion at the symphyseal region measuring ~3.2 x 1.6 cm with anechoic center with peripheral vascularity.



**Topogram from CT-Scan:** It reveals lytic lesion at the symphyseal region of the mandible with scalloping of the posterior cortex.



• **CT Scan Mandible:** It revealed a unicystic expansile, lytic lesion at the mandibular midline, symphyseal and parasymphyseal region with involvement of alveolar surface with loss of left central and lateral incisors.



**CONCLUSION:**

- Case with which we are dealing with is unicystic ameloblastoma type (confirmed by histopathological report of biopsy of mandibular symphysis). The ameloblastoma is usually of late diagnosis because of its poor symptoms and low prevalence. Its treatment preferably includes the resection with safety margins and

immediate reconstruction whenever possible.

- Currently histologic examination is the most sensitive tool for differentiating UA from odontogenic cysts. The Careful examination of the whole specimen is essential with multiple sectioning. Thus, lesions which clinically and radiographically appear to be odontogenic cysts may prove to be ameloblastomas. Demonstration of a single cystic sac lined by ameloblastomatous epithelium seen only in focal areas often is characteristic of UA.
- The patient has been advised for resection of the tumor with mandibular reconstruction.

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