

AN UNUSUAL CASE OF AMELOBLASTOMA: A CASE REPORT

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ABSTRACT:

A 35 years old female with the chief complaint of swelling and pain in relation to lower jaw. Extra oral examination revealed facial asymmetry due to swelling on symphysis till body of the ramus anteroposteriorly, Superiorly the swelling extended from left premolar to right premolar region. Clinical examination revealed hard swelling in the symphysis of mandible with normal overlying skin. The histological perspectives are discussed and compared with previous cases in the literature available.

Key words: jaw, mandible, pain, swelling

INTRODUCTION:

Ameloblastomas are the most common neoplasms of the jaws. They are usually first recognised between the ages of 30 and 50, and rare in children and old people. Eighty percent form in the mandible: of these, 70% develop in the posterior molar region, and often involve the ramus. They are symptomless until the swelling becomes obtrusive. Radiographically, ameloblastomas typically form rounded, cyst-like, radiolucent areas with moderately well-defined margins and typically appear multilocular. Lingual expansion may sometimes be seen, but is not pathognomonic of ameloblastoma^[1]. The recent WHO classification of odontogenic tumours with no inductive potential. We herewith report a case of follicular ameloblastoma with the

histological perspectives and discuss the possible cases available in literature^[2].

CASE DETAIL:

A 35 year old female patient presented to the department of Oral Pathology, Darshan Dental College and Hospital, Udaipur, India with the chief complaint of swelling and growth in the front region of jaw intraorally. Patient was asymptomatic 6 years back when she experienced swelling in the lower jaw which was slowly increasing in size. Patient also complained of numbness of lip.

The Extraoral examination revealed parotid gland (both) slightly enlarged and submandibular lymph node palpable (fig 1). On intraoral examination it was found that there was difficulty in mouth opening, numbness present with lower

lip, inflamed labial and buccal mucosa. The lesion was pigmented, located in the anterior region, size-4x4 cm, ovoid shape, smooth surface, irregular margin extending from lower left canine to lower right canine and tender on palpation. Pain was present on mandibular anterior region. It was dull aching, intermittent, no relieving and aggravating factor, numbness of lip present and difficulty in deglutition.

On inspection of the swelling, single swelling at mandibular anterior region, pink in colour with irregular margin, smooth surface, visible pulsation absent. On palpation temperature was afebrile, tenderness- present, soft in consistency, fluctuation was moving both side. Grade I mobility 31,32,34, 41, 42, 44. TMJ articulation crepitus was felt.

An OPG radiographs was advised. Radio logically; tumour exhibits a compartmented appearance with septa of bone extending into the radiolucent tumour mass. Periphery is smooth and lesions is multilocular.(fig 2)

In the present case, intra oral block excisional Hemimandibulectomy was done in the Department of Oral Surgery and the excisional specimen was sent to oral pathology department for histological analysis.(fig 3)

Histologically; H &E stained showed large often interconnected Ameloblastic follicles .

The intervening connective tissue was fibrillar and loose to dense in mature

capsule suggesting for Follicular Ameloblastoma.(fig 4,5,6)

DISCUSSION:

Ameloblastoma is a benign, locally aggressive odontogenic neoplasm with variable clinical expression and accounts for 1% of all cysts/tumors of jaws and 18% of all odontogenic neoplasms. It is typically slow growing, locally aggressive and rarely metastasizes but has a high rate of recurrence (55–90%) if not removed adequately [1].

As per the WHO system of 2003, ameloblastoma is classified based on differences in biologic behavior, treatment plan and recurrence rate as follows:

1. classic solid/multicystic ameloblastoma,
2. unicystic ameloblastoma,
3. peripheral ameloblastoma,
4. desmoplastic ameloblastoma, including the so-called hybrid lesions [3]

Bilkay *et al.* (2004) in retrospective analysis of 100 patients with benign mandibular lesion has found that 78% of the cases had a radiolucent lesion and 83% of this had cysts with well defined borders [4]. The relative frequency of occurrence of unicystic ameloblastoma(UA) has been reported as between 5% to 22% of all types of ameloblastomas (Reichart *et al.*, 1995) [5].

The mean age at the time of diagnosis differs considerably according to the UA variants. Those diagnosed as Dentigerous, occurred in much younger patients with mean age of 16.5 years, 78.3% occurring in the 1st and 2nd decades while for non Dentigerous the mean age was 35.2 years with age ranging from 40 to 70 years (Reichart & Philipsen, 2004).⁶ In the present case patient was 35-year-old which is in accordance to the literature (Reichart & Philipsen, 2004) ^[6]. Histologic subgrouping by Philipsen and Reichart has also been described:

- Subgroup 1—luminal UA;
- Subgroup 1.2—luminal and intraluminal;
- Subgroup 1.2.3—luminal, intraluminal and intramural;
- Subgroup 1.3—luminal and intramural

Unicystic ameloblastoma (UA) refers to those cystic lesions that show clinical, radiographic, or gross features of a mandibular cyst, but on histological examination show a typical ameloblastomatous epithelium lining part of the cyst cavity, with or without luminal and/or mural tumour growth ^[7,8]. In this case report we present an uncommon multilocular unicystic ameloblastoma encountered in a 40 year old female patient.

CONCLUSION:

The diagnosis of follicular ameloblastoma was based on clinical, radiological,

histopathologic features. It is a tumor with a strong propensity of recurrence, especially when the ameloblastic focus penetrates the adjacent tissue from the wall of the cyst. Radiographically, most of ameloblastomas show multilocularity Very rarely, we come across a case with presentation of both multilocular and unicystic type in the same person crossing midline. Unicystic variant of ameloblastoma with aggressive histologic behaviour also might be successfully treated with marsupialisation with subsequent enucleation, and this approach can be considered as an alternative to resection.

The overall results of such cases can bring out a consensus to arrive at an accurate assessment of odontogenic tumours with inductive potential.



Fig 1 Patient with complaint of anterior midline swelling



Fig 2 OPG showing well defined multilocular lesion



Fig 3 Surgically excised swelling

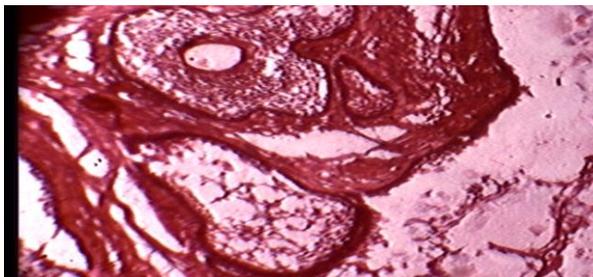


Fig 4 Under scanner view bits of soft tissue showing epithelium and connective tissue.

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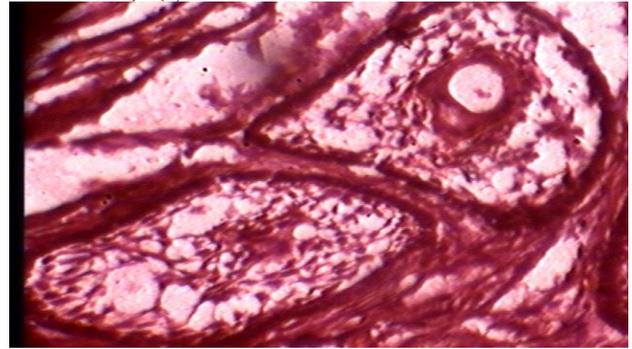


Fig 5. Low power view shows stratified squamous para keratinized surface epithelium with islands of enamel organ like tissue consisting of stellate reiculum like cells in the mature fibrous connective tissue stroma

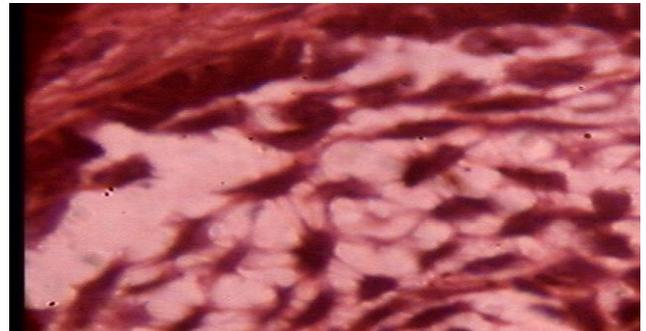


Fig 6. High power view shows peripherally placed ameloblast like cells with stellate reticulum.

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