FOLLICULAR AMELOBLASTOMA – A CASE REPORT

INTRODUCTION

Ameloblastoma is a benign epithelial odontogenic tumor that typically arises in the mandible or maxilla or, rarely, in the immediately adjacent soft tissues. Although ameloblastoma comprises only 1% of all tumors and cysts of the jaws, it is the most common odontogenic neoplasm. Most cases affect the mandibular molar and ramus regions. The tumor is usually asymptomatic and presents itself as a slowly enlarging facial swelling. Ameloblastoma is a locally destructive tumor with a propensity for recurrence if not entirely excised. The six histopathologic subtypes of ameloblastoma include the follicular, plexiform, acanthomatous, granular cell, basal cell, and desmoplastic types. These subtypes can exist singly or in combination. The tumor is also subdivided into variants, based on its overall histologic architecture. These include the solid, multicystic, multicystic plus solid, and unicystic types. The most common plain radiographic appearance of ameloblastoma is that of a multilocular cystlike radiolucency, surrounded by a radiopaque border. However, unicystic radiographic appearances are also observed.

The goal of treatment ameloblastoma is to achieve complete removal of the lesion and appropriate reconstruction of surgical defect. We present a case of a large follicular mandibular ameloblastoma in a 60 year old female patient.

CASE REPORT

A 60 year old female patient reported to the department with a chief complaint of swelling on the right lower third of the face for the past 1 year. Her history of present illness revealed that the swelling was of a size of peanut to begin with which gradually increased to the present size. There was no history of pain, paraesthesia, anaesthesia or secondary changes. On palpation swelling was hard in consistency with no elevated temperature and pain. On intraoral examination there were missing both the mandibular 46 and 47 with vestibular obliteration in relation to the right mandibular posterior teeth. Based on a clinical picture a provisional diagnosis of ameloblastoma was considered.

Patient was subjected to FNAC and routine radiographic examination. FNAC yielded no fluid. OPG revealed a solitary mixed radiolucent and radiopaque area extending from the molar area to the ascending ramus upto sigmoid notch, roughly oval, measuring about 5cm×3cm in size with sepsis in between the radiolucent are giving soap bubble appearance (Figure 1).

The surgical treatment plan was for a hemimandibulectomy via upper McFee incision combined with a visor flap and then to stabilize the mandible with stainless steel reconstruction plate. The procedure was to be done under general anaesthesia with the naso-endotracheal intubation.

Intraoperatively, after the incision was extended anteriorly (Figure 2), the skin flap was raised and retracted laterally and superiorly exposing the mandible underneath, which is made free from the lingual tissue by detaching the muscles from it. The modified osteotomy cut was placed at the midline as shown (to encompass as much normal bone as possible to stabilise the plate), completed both buccally and lingually and condyle was detached from the glenoid fossa, right hemimandible was completely removed enblock with the tumour, then reconstruction with AO plates was done (Figure 3). Hemostasis was achieved, vacuum drain was secured, primary closure was done in layers. Antibiotics, analgesics and anti-inflammatory drugs were given postoperatively. Postoperative period was uneventful, she was on Ryles tube feeding till day 12 and thereafter started with the soft diet after the tube was removed. Patient has been kept under periodic follow up since then (Figure 4). No recurrence had been reported till date (Figure 5); though being a benign tumour long term follow up is of essence. The resected specimen had histopathologic
features consistent with follicular ameloblastoma.

**DISCUSSION**

Ameloblastoma is a benign epithelial odontogenic tumor but is often aggressive and destructive, with the capacity to attain great size, erode bone and invade adjacent structures. Although the term ameloblastoma was coined by Churchill in 1933, the first detailed description of this lesion was by Falkson in 1879. It is the most common odontogenic tumor although it represents only about 1% of tumors and cysts of the jaws.

In the mandible (80% of ameloblastomas), 70% are located in the area of the molars or the ascending ramus, 20% in the premolar region, and 10% in the anterior region. About 10-15% of ameloblastomas are associated with a non-erupted tooth. In the present case, a large follicular ameloblastoma was found in the ascending ramus and molar region of the mandible and it was not associated with a non-erupted tooth.

Ameloblastoma appears with equal frequency between sexes, although a higher frequency in females than in males has been described. In our case, the patient was female and was in sixth decade of her life. Clinically, it frequently manifests as a painless swelling, which can be accompanied by facial deformity, malocclusion, ulceration and periodontal disease and paraesthesia of the affected area. In our case, clinical examination revealed a large, expansive mass in the ascending ramus and molar region of the mandible. The swelling was hard, painless to palpation and covered by normal mucosa.

**CONCLUSIONS**

Ameloblastoma is considered to be a benign, but locally invasive odontogenic tumour with a high rate of recurrence. Essentially, most studies showed that the prognosis for ameloblastoma is more dependent on the method of surgical treatment rather the histologic type of tumour. Resection with some safe margin (marginal, segmental or composite resection depending on the site and size of the lesion) is the best primary method for treating solid/multicystic ameloblastomas to avoid recurrence.

**REFERENCES**


![Fig 1](image1.jpg) **Fig 1** Showing multilocular lesion on the right body and ascending ramus of the mandible

![Fig 2](image2.jpg) **Fig 2** Intra operative photograph of the patient showing extended McFee incision combined with a Visor flap

![Fig 3](image3.jpg) **Fig 3** Intra operative photograph of the patient showing AO reconstruction plate

![Fig 4](image4.jpg) **Fig 4** Post operative photograph of the patient showing reconstruction plate in place

![Fig 5](image5.jpg) **Fig 5** 20 days post operatively