AMELOBLASTOMA IN AN 82 YEAR OLD FEMALE PATIENT: A CASE REPORT

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ABSTRACT

Ameloblastoma is an aggressive tumor known for its local invasiveness. It is a true neoplasm of odontogenic epithelial origin and the second most common odontogenic neoplasm. This paper reports a case of large ameloblastoma in an 82 year old female patient and its diagnosis using clinical, radiological and histological findings.

Keywords: Ameloblastoma; odontogenic tumor; mandible.

Introduction

Ameloblastoma is a rare tumor occurring in jaw. First detailed description of this lesion was given by Falkson in 1879, but the term ameloblastoma was coined by Churchill in 1933. Ameloblastomas account for 1% of all tumours of jaw encountered during 3rd to 5th decade of life. About 80% cases occur in mandible of which 70% cases are seen in ramus. Most common site for ameloblastoma in mandible is molar and ascending ramus accounting for 39% followed by premolar region and anterior region accounting for 16% and 9% respectively. Ameloblastomas are usually benign, locally aggressive and recurrent but metastasis is very rare. Pain is an uncommon finding, reported in some cases but it is not clear whether the pain is due to tumour itself or secondary infection. Patients may present with a slow growing mass, malocclusion, loose teeth or more rarely paraesthesia and pain, however many lesions are detected incidentally on radiographic studies in asymptomatic patients. Most common site of metastasis are the lungs followed by regional lymph nodes, pleura, vertebral, skull, diaphragm, liver, parotid and small intestine. Mechanism of distant spread are debated and include aspiration, haematogenous spread, lymphatic spread and malignant activation of the developmental rests of epithelial tissues. This paper reports a case of large ameloblastoma in an 82 year old female patient and its diagnosis using clinical, radiological and histological findings.

Case History

An 82-year-old female patient reported to the Department of Oral Medicine & Radiology four months back, with a chief complaint of painless progressive swelling in lower left side of face for last two years. Patient had a history of painless progressive swelling in lower left side of oral region involving complete border of mandible. On clinical examination the swelling involved left mandibular region and was firm to bony hard in consistency with normal overlying skin. The teeth involved were 42 to 38. No lymphadenopathy on palpation was detected. Intraoral examination revealed obliteration of buccal sulcus in region of 33 to 37 with cortical expansion. The swelling was non-tender and covered by normal mucosa (Figure 3). Patient gave history of exfoliation of the tooth i.e, 36 and 37 during an incisional biopsy done four months back.

Patient was advised for further investigations, which included panoramic imaging, PA mandible, incisonal biopsy of lesion and routine haematological investigations. Radiographic report revealed large cortical expansion and the inferior border of mandible was not traceable from 43 to 38 region (Figure 4, 5). From these clinical and radiological finding a possible diagnosis of ameloblastoma was made. To obtain a specific diagnosis an incisional biopsy was done (Figure 6). Histopathological processing of the tumor revealed a plexiform ameloblastoma predominantly composed of epithelium arranged as a tangle network of anastomosing strands. Cords or sheets of epithelium are bounded by columnar or cuboidal ameloblast like cells surrounding more loosely arranged epithelial cells. Supporting stroma is loosely arranged and vascular. Aspirate obtained during biopsy was blood tinged in colour. In the present case although the surgical removal was warranted, patient is not subjected to surgery considering the age.

Discussion

Ameloblastoma is a benign epithelial odontogenic tumour but is often aggressive and destructive with capacity to attain greater size, erode bone and invade adjacent structure. It is the most common odontogenic tumor although it represents only about 1% of tumors of jaws. Various histological types have been described, including follicular, plexiform, acanthomatous, granular and basal cells. From available literature it is evident that follicular ameloblastoma is most prevalent histological variant (64.9%) followed by plexiform (13%), desmoplastic (5.2%) and acanthomatous (3.9%). Radiographic features of most ameloblastoma cases had a characteristics expansile, radiolucent, multilocular cystic lesion, with a characteristic soap bubble like appearance. Other findings also include cystic areas of low attenuation with scattered iso-attenuating regions, representing soft tissue component. Thinning and expansion of the cortical plate with erosion through the cortex can also be seen. Associated unerupted teeth may be displaced and resorption of roots of adjacent teeth is common. In our case panoramic image revealed, large cortical expansion and thinning of cortical plate. The average age of diagnosis of patient with ameloblastoma is 34 years, with a range of 5-74 years. Both sexes are equally affected.
present case age is a significant factor, since the age of patient was in 82 years. About 10-15% of ameloblastomas are associated with a non-erupted tooth.\textsuperscript{17} In the present case, a large plexiform ameloblastoma found in the ascending ramus and molar region of the mandible and it was not associated with an unerupted tooth. Treatment is not clearly defined and main therapeutic tool is surgical intervention, as radiotherapy and chemotherapy have not shown encouraging results. Considering that there was no bone margin available and the age factor of the patient the tumor could not be treated.

**Conclusion**

In conclusion its incidence, combined with its clinical behaviour, makes ameloblastoma one of the most significant odontogenic neoplasm of concern of oral and maxillofacial surgeons.

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**References**


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