Follicular Ameloblastoma: A Case Report

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Ameloblastoma is a true neoplasm of odontogenic origin. It is the most common odontogenic neoplasm, and only odontome out numbers it in reported frequency of occurrence. This tumor comprises about 1% of tumors and cysts arising in the jaws. It appears most commonly in the third to fifth decades and with equal frequency between sexes. Ameloblastoma prevalently occurs in the mandibular molar and ramus areas. The patients usually present late after the tumor achieved considerable size to cause facial disfigurement. Here we present a case of follicular ameloblastoma in a 38-year-old female patient who presented with a swelling on the right side of the mandible.

Keywords: Ameloblastoma, En bloc surgical excision, Mandible

INTRODUCTION

Ameloblastoma is a true neoplasm which is described as tumor that is usually unicentric, nonfunctional, intermittent in growth, anatomically benign and clinically persistent.¹ The term Ameloblastoma was suggested by Ivy and Churchill in 1934 based on odontogenic epithelial etiology.² Ameloblastoma occurs in a wide range of age groups with a mean age of 36 years and equally among the sexes.³ It is a slow growing, often-asymptomatic tumor, arising in the mandible in over 80% of cases. The posterior region and the ascendam ramus are the most involved areas.⁴ Based on histopathology ameloblastoma is classified into: Follicular, acanthomatous, granular cell, basal cell, and plexiform.⁵ Follicular and plexiform ameloblastomas are the most common, with incidence rates of 27.7% and 21.1% respectively, followed by acanthomatous and the desmoplastic types.⁶ 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.⁷ The goal of treatment ameloblastoma is to achieve complete removal of the lesion and appropriate reconstruction of surgical defect. We hereby report a case of 38-year-old female with emphasis on correlation between histological findings and clinical behaviour of lesion.

CASE REPORT

A 38-year-old female patient reported to the Department of Oral Medicine and Radiology, Institute of Dental Sciences, Bareilly, UP with a chief complaint of swelling on right lower third of face since 6 months. History of present illness revealed that initially the swelling was small in size and gradually it increased to reach upto present size. It was not associated with any pain or discharge. Patient had no complaint of dysphagia, trismus, dysphonia fever, chills, loss of weight and paresthesia. Her past medical history was not significant. On extra-oral examination a solitary oval swelling was present on the right lower third of the face extending antero-posteriorly from the posterior border of the mandible to 1 cm behind the corner of the mouth, and from the line joining the corner of the mouth to tragus of the ear to 1 cm below the lower border of the mandible, roughly measuring about 4 × 5 cm in size with no secondary changes. On palpation swelling was bony hard in consistency with no elevated, temperature and pain. On intraoral examination, 46, 47, 35, 27 were clinically missing with vestibular obliteration in relation to the right mandibular posterior teeth (Figure 1). Based on a clinical picture a provisional diagnosis of ameloblastoma was considered. Patient was subjected to fine-needle aspiration cytology (FNAC) and routine radiographic examination. FNAC yielded yellow colored fluid with a tinge of blood. Orthopantamogram revealed a multilocular radioluscency extending from distal aspect of 45 to retromolar pad area roughly oval, measuring about 4 × 3 cm in size with septae in between the radiolucent area giving soap bubble appearance along with expansion of inferior border of mandible in right body region (Figure 2). Incisional biopsy was done which revealed odontogenic follicles exhibit tall columnar ameloblast like cells containing stellate reticum like cells with background stroma made of fibrocollagen with

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Ameloblastoma represents 1% of all tumors and cysts that involve maxillomandibular area and about 10% of odontogenic tumors. 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. Follicular ameloblastoma presents as a painless swelling or slow expansion of the jaws, and it is described as multilocular expansile radiolucency having soap bubble or honey comb appearance, a classic finding which was also demonstrated in our case. In our case swelling was hard, painless to palpation and covered by normal mucosa. Follicular pattern simulates the developing dental follicle and the enamel organ by arranging the epithelial cells to resemble stellate reticulum. Follicular ameloblastoma consists of discrete follicles with similarity to the stellate reticulum of enamel organ and with the varying quantity of conjunctive tissue stroma. Our findings also agreed with the data given in the literature. Optimal treatment of ameloblastoma consists of wide surgical excision.

CONCLUSION

Ameloblastoma is an aggressive tumor of odontogenic origin. Treatment decisions for ameloblastoma are based on the individual patient situation and the best judgement of the surgeon. Cases of ameloblastoma should thus be studied carefully, correlating their histologic pattern with biologic behavior to detect subtle changes in histology that may predict aggressive behavior. Prognosis is good if an early diagnosis of the lesion is made with prompt surgical intervention.

REFERENCES


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