A RARE CASE OF COMPLEX ODONTOME WITH DENTIGEROUS CYST LINING IN THE ANTERIOR MAXILLA

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ABSTRACT

Odontomas and dentigerous cysts are the common findings in the daily practice of dental professionals. However, simultaneous pathologies of odontome and dentigerous cyst are uncommon and diagnosis based on the radiographic appearance of such lesions is a challenge to overcome. They together are potential for complications like attaining large size, root resorption, destruction of jaw bones and some shows neoplastic changes like ameloblastoma. The potential complications justify histopathological evaluation and enucleation of all the odontomes. This paper is to describe a rare case of complex odontome with dentigerous lining in the anterior maxilla.

KEY WORDS: Complex odontome, Dentigerous cyst, Lining

INTRODUCTION

Odontomas are non-aggressive, hamartomatous developmental malformations or lesions of odontogenic origin, which consists of enamel, dentin, cementum and pulp tissue. These lesions are composed of more than one type of tissue and for this reason, have been called as composite odontomas. Odontomas are further divided into compound and complex odontomas. The compound odontome is composed of single or multiple, small tooth-like structures and the complex odontome may consists of conglomerate mass of enamel and dentin, which bears no anatomic resemblance to a tooth. The etiology of odontomas is not clearly established but genetic factors and environmental factors such as local trauma and infection has been proposed. Odontomas show no gender predilection. They are most often diagnosed in the second decade of life on routine radiographic examinations. Compound odontomas are more prevalent than complex odontomas. Compound odontomas commonly occur in the incisor-canine region of the maxilla and complex odontomas are frequently located in the premolar and molar region of both jaws. Odontomas erupting into the oral cavity are rare. The first case was published in 1980, and since then only 17 cases have been reported in the literature. Odontomas occur more often in the permanent dentition. An unusual association of odontomas with primary dentition was reported. We report a rare case of complex odontome with dentigerous cyst lining in the anterior maxilla, which was treated surgically. The unusual site of occurrence, complex odontome in the anterior maxilla and most importantly its association with a dentigerous cyst lining makes it worth presenting.

Case report

A 22 yrs old male patient had come to the Oral Medicine clinic with a chief complaint of discolored upper front tooth for the past 5yrs. Intraoral examination revealed a non vital tooth 11 and otherwise asymptomatic with no clinical signs of periapical or periodontal involvement (Fig.1). The patient was healthy with an unremarkable medical history. Intraoral periapical Radiograph revealed a dense calcified irregular shaped mass (Approx. 1 cm) which was surrounded by a thin radiolucent rim in relation with right central incisor (Fig.2). The differential diagnosis of the radiopacities included periapical cemental dysplasia and benign cementoblastoma.

Complete surgical removal of the calcified tissue was done under local anesthesia and subjected to histopathological examination. Sections stained with Hematoxylin and Eosin showed the presence of dentin and cementum with primary dentition. An unusual association of odontomas with primary dentition was reported. We report a rare case of complex odontome with dentigerous cyst lining in the anterior maxilla, which was treated surgically. The unusual site of occurrence, complex odontome in the anterior maxilla and most importantly its association with a dentigerous cyst lining makes it worth presenting.
Discussion
Odontomas are non-aggressive, hamartomatous developmental malformations or lesions of odontogenic origin appearing as small, solitary or multiple radiopaque lesions found on routine radiographic examinations. Although odontomas may be found in any tooth bearing region of the jaws, Compound odontomas commonly occur in the incisor-canine region of the maxilla and complex odontomas are frequently located in the premolar and molar region of both jaws. The present case shows localization of the complex odontome in the incisor-canine region of the maxilla. Dentigerous cyst arising from the fibrous connective tissue lining of the odontome is rare. Cases of Complex odontomas associated with dentigerous cyst were reported. The present case also showed dentigerous cyst arising from fibrous connective tissue lining of the complex odontome. The present case is rare because of maxillary localization and occurrence of surrounding dentigerous cyst in complex odontome.

CONCLUSION
Dentigerous cyst arising from the fibrous connective tissue lining of the odontome is rare. If arise, they are potential for attaining large size, tooth resorption, destruction of jaw bones and some shows neoplastic changes like ameloblastoma. The potential complication justifies radiographic screening, histopathological evaluation and complete enucleation of all the odontomes.

References

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