



RESEARCH ARTICLE

DENTIGEROUS CYST ASSOCIATED WITH IMPACTED THIRD MOLAR

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ABSTRACT

Dentigerous cyst is the most common odontogenic cyst. It is characterized by a unilocular radiolucent lesion that encloses permanent tooth buds or, under certain circumstances, displaced tooth buds. Such cyst remains initially completely asymptomatic unless when infected and can be discovered only on routine radiographic examination. Here is a case of dentigerous cyst, present in left mandibular region associated with cortical expansion and facial asymmetry which has been enucleated and tooth extracted surgically is discussed in the present case report.

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INTRODUCTION

Dentigerous cyst is defined as a cyst that originates by separation of the follicle from around the crown of unerupted tooth (Neville, 2005). They are generally associated with the crowns of impacted or unerupted permanent teeth, but they can be associated with an odontoma or developing tooth and even deciduous teeth (Kushukakawa, 1992). It is the second most common type of odontogenic cysts, accounting for 49 % of all cystic lesion. Posterior mandible is by far the most commonly affected region. Commonly affected teeth in order of frequency are mandibular third molars, permanent maxillary canine, permanent maxillary third molar and less commonly permanent central incisor (Peterson, 2003). Dentigerous cyst if infected may become associated with pain and swelling. Such an infection may arise with a partially erupted tooth or by extension from a periapical or periodontal lesion that affects an adjacent tooth. The radiographic pattern is characterized by a well defined, unilocular radiolucent lesion surrounding the crown of an unerupted tooth. Cyst to crown relationship shows several variations: central, lateral and circumferential variants (Neville, 2005).

Case Report: A 35-year-old male reported to the Dental Department of LLRM Medical College, Meerut, with chief complaint of a painless swelling in the lower jaw for duration of 1 year. At the time of his presenting, the patient had no systemic disease. On extraoral examination, asymmetrical face with swelling on lower left side of face and palpable and tender left submandibular lymph node. Complete enucleation of the cyst along with the impacted third molar was done under local anesthesia via an intraoral approach, and the closure was done by resorbable suture material. The specimen was sent for histopathologic examination which confirmed dentigerous cyst.

DISCUSSION

Dentigerous cysts are developmental cyst of odontogenic origin and the most prevalent, comprising 14 to 24% of the entire jaw cyst. Three types of dentigerous cyst have been described radio-graphically: (1) The central variety, in which the radiolucency surrounds just the crown of the tooth, with the crown projecting into the cyst lumen, (2) the lateral variety, in which the cyst develops laterally along the tooth root and partially surrounds the crown, and (3) the circumferential variant in which the cyst surrounds the crown but also extends down along the root surface as if the entire tooth is located within the cyst (Friedlander, 2015).

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Figure 1. Radiograph showing radiolucency around third molar



Figure 2. Access to the cystic cavity



Figure 3. Complete enucleation of the cyst along with impacted third molar

Dentigerous cysts are usually solitary, slow growing, asymptomatic lesions that are incidentally found during routine radiographs taken to identify a missing tooth. They can occur at any location of the jaw but frequently seen in relation to impacted mandibular third molars followed by the maxillary canines and maxillary third molars (Shah, 2002). In the present case report, the surgical treatment consisted on enucleation and extraction of the cyst-associated unerupted teeth. Enucleation was preferred over the marsupialization. Since there was no danger of devitalizing teeth, the surgical procedure did not require any sacrifice of any important structure, and the impacted third molar was non-functional.

REFERENCES

- Friedlander, L.T., Hussani, H., Cullinan, M.P., Seymour, G.J., De Silva, R.K., De Silva, H., *et al.* 2015. VEGF and VEGFR2 in dentigerous cysts associated with impacted third molars. *Pathology.*, 47:446-51.
- Kushukakawa, J., Irie, K., Morimatsu, M. 1992. Dentigerous cyst associated with deciduous tooth: a case report. *Oral Surg Oral Med Oral Pathol.*, 73:415-418.
- Neville, B.W. 2005. *Oral and maxillofacial pathology*, 2nd edn. Saunders, Philadelphia.
- Peterson, L.J., Eliis, E., Hupp, J.R., Tucker, M.R. 2003. *Contemporary oral and maxillofacial surgery*, 4th edn. Mosby, St. Louis.
- Shah, N. 2002. (Department of Oral and Maxillofacial Surgery, Central Middlesex Hospital, London), Thuau H, Beale T. Spontaneous regression of bilateral dentigerous cysts associated with impacted mandibular third molars. *Br Dent J.*, Jan 26;192(2):75-76.
