

Ectopic Third Molar- A case report on two stage technique

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Figure 2



Figure 3

Abstract

Ectopic wisdom teeth are rare but can present with a number of symptoms and complications. Pathological or congenital reasons can cause the migration of third molars; when associated with a cyst, significant co-morbidities can arise.

We present a case report of an ectopic third molar surrounded by a large cyst with a positive diagnosis of Nevoid Basal Cell Carcinoma Syndrome treated with a two stage technique in order to reduce co-morbidities.

Introduction

Impacted third molar prevalence is high in the population but ectopic wisdom teeth are less commonly reported¹. An ectopic tooth is defined as one that does not follow its natural course of eruption². Ectopic wisdom teeth can cause multiple complications. A risk of damaging adjacent structures has been reported previously including blindness during surgical removal of ectopic teeth and their associated cysts from the maxillary antrum³.

The etiology for ectopic third molars is poorly understood but theories have been proposed regarding impacted or displaced first and second molars which can be broadly categorized in to developmental, pathological, iatrogenic and trauma⁴.

Case report

A 23-year-old female was referred to the Oral and Maxillofacial Department at Pinderfields General Hospital by her Orthodontist for a severely ectopic upper right third molar in the maxillary antrum; multiple well defined radiolucencies were also noted in the angle of mandible bilaterally and the upper left maxilla. The patient was asymptomatic at the time of presentation. Clinical examination revealed unerupted upper right third molar with buccal expansion palpable, both mandibular wisdom teeth were partially erupted vertically and no paraesthesia was noted.

A CT scan confirmed the ectopic upper third molar and highlighted the proximity of the tooth to the right orbital floor and perforation of buccal bone due to a large cyst in the maxilla (figure 1).



Figure 1



Figure 4

A two stage technique was carried out to enucleate a large cystic lesion in the maxillary antrum and to allow safe removal of an ectopic third molar.

The first stage involved marsupialisation of the maxillary cyst intra orally with attachment of a paediatric naresopharyngeal tube to the cyst lining to allow manual irrigation; a biopsy was also taken. At the same procedure, bilateral mandibular wisdom teeth were removed, the cyst in the right mandible was enucleated whilst the radiolucency in the left was marsupialized.

The patient demonstrated good co-operation with manual irrigation of the marsupialized cysts and a favourable outcome was seen at a six-month review (figure 2,3). The ectopic third molar migrated in to a safe zone which allowed for a more controlled enucleation of the cyst and the ectopic third molar allowing preservation of surrounding structures during a second stage procedure (figure 4). Patient remains asymptomatic at 5 month review.

Histopathology

The histopathology report confirmed a diagnosis of Keratocystic Odontogenic Tumour (KOT). Histologically there is evidence of budding of basal cell layer and high prevalence of daughter cells, strongly suggestive traits associated with Nevoid Basal Cell Carcinoma Syndrome (NBCCS) also termed Gorlin Goltz syndrome (figure 5).

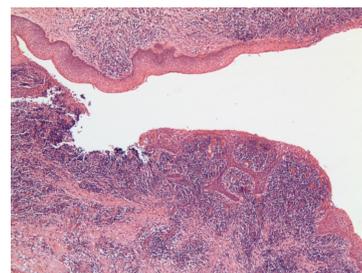


Figure 5

Conclusion

Severe complications can arise during surgery or post operatively when removing an ectopic tooth or large cyst. Marsupialization is a known and popular method used throughout the surgical field to manage large cysts which have a high risk of perforation of bone or close to vital structures. An ectopic tooth is able to migrate when marsupialized, with the cyst as shown in this case report. When presented with a patient with an ectopic tooth and multiple cysts Gorlin Goltz syndrome should be of high suspicion as well as an KOT.

References

1. Wang C, Kok SH, Hou L, et al. Ectopic third molar in the ramus region: report of a case and literature review. *Oral Med Oral Surg Oral Path Oral Radiol Endod* 2008;105:155-16.
2. Yaseen S, Naik S. Uloopi K Ectopic eruption - a review and case report. *Contemp Clin Dent*. 2011;2 (1) 3-7
3. Savundranayagam A. Migratory third molar erupting into the lower border of orbit causing blindness in the left eye. *Aust Dent J*. 1972;17:418-20
4. N.M. Ahmed, B. Speculand, Removal of ectopic mandibular third molar teeth: literature review and a report of three cases, *British Journal of Oral Surgery*, British Association of oral surgery, 2012;5:39-44

