

CASE REPORT

Dentigerous Cyst – Finding in a pregnant patient: A case report

S K Roy¹, Asad Nehal², Vasudha Seth³, Shibli Usmani⁴

INTRODUCTION

Dentigerous cysts are the most common developmental cyst of jaw and second most common type of odontogenic cyst after radicular cyst¹. These are most commonly noted in second and third decade of life.

Dentigerous cyst also known as follicular cyst is caused due to fluid accumulation between the reduced enamel epithelium and enamel surface of a formed tooth. It originates by separation of the follicle from around the crown of an unerupted tooth².

Following is a case report of Dentigerous cyst where treatment had to be delayed owing to pregnancy and expanding to an extent that it involved vital structures in maxilla.

Keywords: Dentigerous cyst, Protein estimation test, CBCT.

CASE REPORT

A 31 year old female patient referred from clove dental Preet Vihar clinic to Clove Dental Noida Sec-44 with C/o painless swelling involving right upper jaw and it crossed the midline towards the left upper jaw since 10 months. Patient had no systemic illness and is a lactating mother. Patient gave history of mild pain and swelling during first trimester of pregnancy when 11 12 and 53 were endodontically treated but no surgical intervention was done.

Intra oral examination revealed a firm, diffused non tender swelling in right upper labial vestibule. There was no palatal swelling. Vestibular obliteration was also noted.

-
1. MDS (OMFS), Consultant, Clove Dental
 2. MDS (OMFS), Consultant, Clove Dental
 3. MDS (Periodontology), Consultant, Clove Dental
 4. MDS (Prosthodontics), Consultant, Clove Dental

Corresponding Author

Asad Nehal, MDS (OMFS)

Consultant, Clove Dental

Email: asad.nehal@clovedental.in

INVESTIGATIONS

Histopathological

Cystic fluid evaluation for protein observed 5.83gm/dl suggestive of Radicular cyst/dentigerous cyst / ameloblastoma.

Incisional biopsy was done 1 month back which is consistent with dentigerous cyst.

Radiological

CBCT report revealed a unilocular well defined intrabony lesion at right anterior maxilla involving 11,12 with maxillary impacted canine resting on lateral wall of nasal cavity and medial wall of maxillary sinus. Measurements were 30mm Anterio-Posteriorly*21 mm BP*26.6mm SI in maximum dimensions.(Fig. 1).



Fig. 1: Pre Op OPG

Thinning/ballooning of cortical plate (buccal cortex), elevated nasal floor with no breaching. (Fig. 2) No perforation seen on palatal cortical plate.

DIFFERENTIAL DIAGNOSIS

On the basis of clinical and radiographic characteristics the differential diagnosis included dentigerous cyst, Odontogenic Keratocyst, ameloblastoma or Adenomatoid Odontogenic tumour.

TREATMENT

Under all aseptic conditions and local anaesthesia coverage a thick mucoperiosteal flap was raised and lesion was exposed (Fig. 3). The lesion was totally enucleated, surrounding surfaces thoroughly curetted,

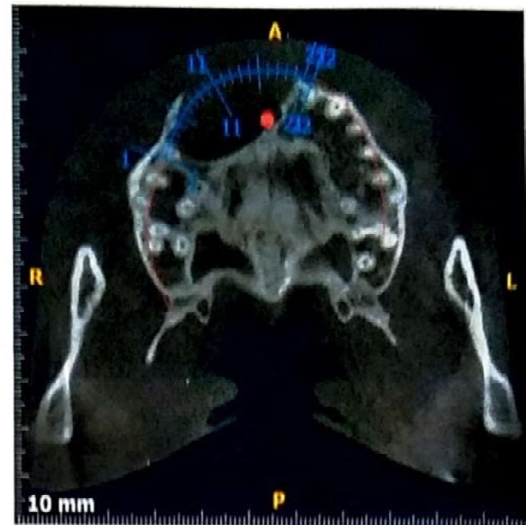


Fig. 2: Pre OP CBCT



Fig. 3: Pre OP Intra oral Image

followed by extraction of impacted 13 (Fig. 4-5). Bipps pack was placed and haemostasis achieved by flap approximation using completed black beaded silk sutures. (Fig. 7).

Surgically enucleated specimens were sent for histopathological examination (Fig. 6). Biopsy shows cyst well lined by thin non keratinised squamous mucosa consistent with dentigerous cyst.



Fig. 5: Maxillary Impacted Canine ter Excision of lesion

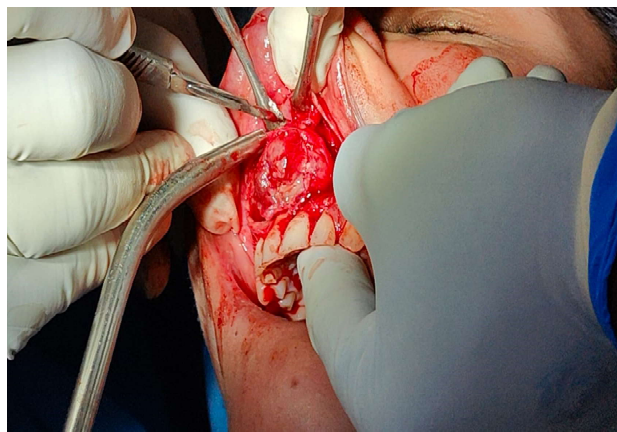


Fig. 4: Intra Operative Procedure

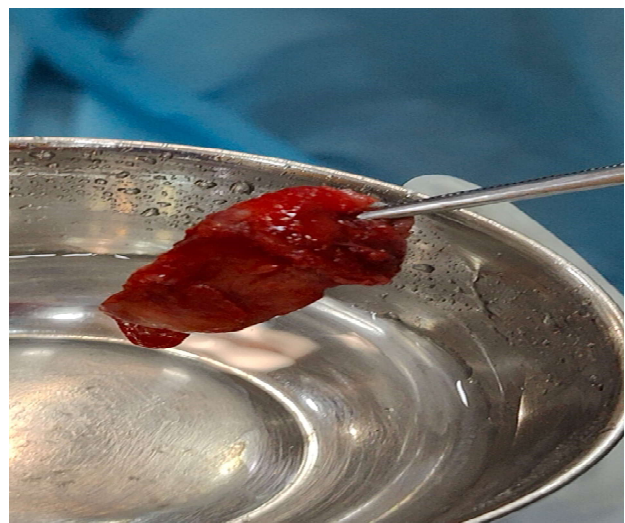


Fig. 6: Enucleated Dentigerous Cyst

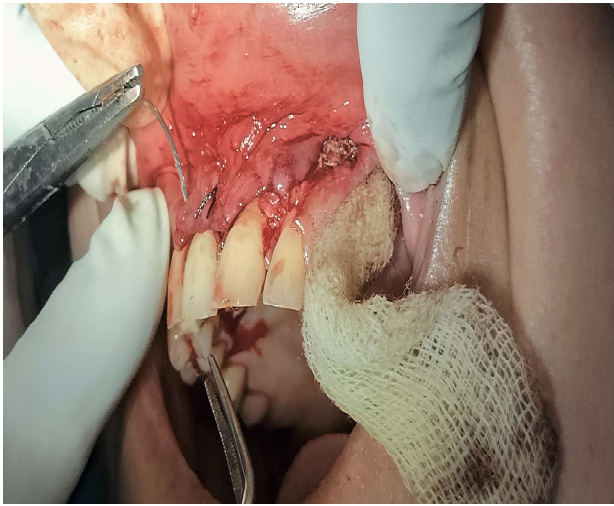


Fig. 7: Image Showing sutures with BIPPS pack



Fig. 9: Ten Days Follow Up



Fig. 8: Post OP OPG

CONCLUSION

Although dentigerous cyst is a common finding and if treated at appropriate timing it heals uneventfully. But in

this case delay in treatment due to pregnancy led to expansion to such an extent that vital structures in maxilla were also involved. Impacted maxillary canine should always be kept under regular follow up to avoid pathological changes. Further research is needed to understand the correlation of pregnancy and flaring up of dentigerous cyst at an unprecedented rate. The patient was also advised to be on regular followup. (Fig 8-9)

REFERENCES

1. **Regezi AJ, Sciubba JJ, Jordan RCK**, Oral Pathology: Clinical pathological correlations. 5th edition. St. Louis; Saunders, 2008:242-4
2. **Neville BW, Damn DD, Allen CM**. Oral and Maxillofacial pathology, 3rd edition, St.Louis, Saunders, 2008:679-81.