

## Ectopic canine tooth: A rare cause for maxillary antral mucocoele

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### Abstract

A 40-year-old female presented with a 10 year history of left sided facial pain and occasional purulent nasal discharge, refractory to antibiotics. Dental examination showed 3 missing teeth in left maxilla one of which had no history of extraction. X-ray paranasal sinus showed a bony opacity in the maxillary sinus but nasal endoscopy was normal. C.T. scan revealed a radio-opaque shadow arising from medial wall of left maxillary sinus with a large maxillary mucocoele. Caldwell-Luc procedure was done and an ectopic canine tooth was seen arising from the medial antral wall. Extraction of the tooth with excision of mucocoele resulted in relieving of the symptoms.

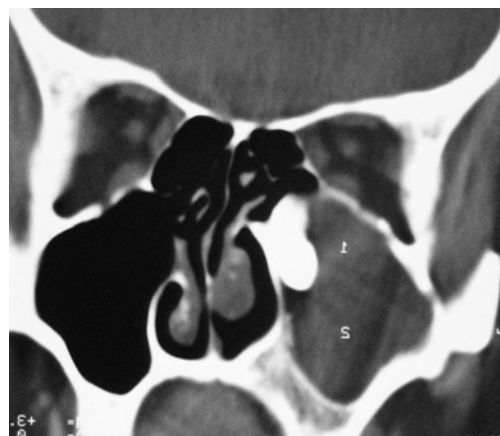
**Keywords:** ectopic tooth, maxillary mucocoele

### Clinical presentation

A 40-year-old female presented with a 10 year history of left sided facial pain and occasional purulent nasal discharge, which was refractory to several courses of antibiotics and analgesics. The facial pain was continuous, dull in character and localized over the maxillary antrum. There was no history of recurrent upper respiratory tract infection. Dental examination showed missing left upper canine, 1st premolar and 3rd molar teeth. The canine was absent with no history of extraction, the premolar was extracted 1 year back while the molar was extracted 6 months back. Curettage was also done 5 months back in relation to left upper lateral incisor for ulcerative gingivitis.

X-ray paranasal sinus Water's view showed a bony opacity in the left maxillary sinus but nasal endoscopy was normal. C.T. scan revealed a radio-opaque shadow arising from medial wall of left maxillary sinus, over the ostium, with a large maxillary mucocoele (Fig. 1). The patient was posted for Caldwell-Luc procedure under general anaesthesia with a differential diagnosis of ectopic tooth and osteoma.

**Fig. 1:** C.T. scan showing ectopic tooth with maxillary mucocoele



### Surgical management

Caldwell-Luc procedure was performed with the anterior antral wall being drilled with cutting burr. The mucocoele was excised and sent for histopathological examination. An ectopic canine tooth was seen arising from the medial antral wall, over the ostium area. The tooth was extracted with Luc's forceps (Fig. 2) and haemostasis achieved. Maxillary sinus ostium was found to be patent after the extraction. All healthy antral mucosa was preserved and the maxillary antrum was packed with antibiotic soaked ribbon gauze through an intranasal antrostomy. The extracted canine tooth was of adult size with well developed roots (Fig. 3).

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**Fig. 2:** Ectopic tooth being removed from the antrum



**Fig. 3:** Extracted ectopic canine tooth



leading to maxillary antral mucocoele formation has been reported.

Small ectopic teeth situated near the maxillary ostium can be extracted endoscopically through the nasal cavity<sup>5</sup>. The treatment of ectopic tooth in the maxillary antrum is surgical removal via a Caldwell-Luc procedure.

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#### Post-operative period and follow up:

The antral ribbon gauze pack was removed on the 2nd post-operative day. Histopathology report confirmed the presence of maxillary antral mucocoele and ruled out the presence of dentigerous cyst. The patient's symptoms were relieved completely after surgery.

#### Discussion

Teeth development results from a complicated interaction between the oral epithelium and underlying mesenchymal tissue<sup>1</sup>. Abnormal tissue interaction during development may result in ectopic teeth development and eruption.

Ectopic eruption of teeth into regions other than the oral cavity has been rarely reported in the nasal septum<sup>2</sup>, mandibular condyle<sup>3</sup>, hard palate<sup>4</sup> and maxillary antrum<sup>5</sup>. An ectopic molar that has been displaced by progressively growing dentigerous cyst has also been reported<sup>6</sup>. No case of ectopic tooth