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Ectopic Erupted Teeth: A Case Report

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Abstract

Introduction: Although ectopic eruptions of teeth into the nasal cavity have been previously reported, the eruption of a tooth into the turbinates of the nose is quite rare. This report describes a case in which a tooth ectopically erupted into the inferior turbinate of the nose. Signs and symptoms of the occurrence, as well as its diagnosis and treatment, are also delineated in this case report. **Case Presentation:** A 32-year-old man with swelling in the left paranasal area of the face was referred to the department of Oral and maxillofacial surgery for diagnosis and treatment. A diagnostic workup resulted in the diagnosis of an ectopic tooth eruption. The tooth was removed via the use of a transoral approach and without any complications.

Conclusions: This case report alerts surgeons to consider the possibility of an eruption of a tooth into the nasal cavity or inferior turbinate of the nose when panoramic radiography reveals an impacted canine tooth located high in the maxilla.

Keywords: Tooth Eruption, Ectopic, Nasal Concha

1. Introduction

Although ectopic eruptions of teeth into regions other than the oral cavity rarely occur, there have been reports of erupted teeth in sites including the mandibular condyle, coronoid process, palate, maxillary sinus, and nasal cavity. In addition, teeth have been observed to erupt through the skin (1). The ectopic eruption of a tooth into the turbinates of the nose, however, is quite rare. This report describes a case of tooth eruption into the inferior turbinate of the nose. Signs and symptoms of the occurrence, as well as its diagnosis and treatment, are also delineated in this case report.

2. Case Presentation

A 32-year-old man with swelling in the left paranasal area of the face was referred to the department of oral and maxillofacial surgery for diagnosis and treatment. The patient had noticed the swelling two weeks previously, after which it began to worsen in spite of treatment with antibiotics. An intraoral examination revealed swelling in the oral vestibule of the maxillary left lateral incisor. A routine radiographic examination revealed some bone resorption in the periapical area of the endodontically treated lateral incisor and an impacted canine tooth located high in the maxilla (Figure 1).

Under local anesthesia and using a buccal approach, a mucoperiosteal flap was raised, pathologic tissue was curetted, and endodontic surgery of the lateral incisor was performed. For surgical removal of the impacted canine, the left canine fossa and piriform rim were exposed. Although some bone was removed, no impacted tooth was found in the surgical field; the mucoperiosteal flap was therefore sutured. A CT scan of the nasomaxillary area was taken to more precisely identify the location of the impacted tooth (Figure 2). The CT scan revealed that the impacted canine was located in the left inferior turbinate. The inferior turbinate was enlarged, and the septum was deviated to the right. Surgical removal of the tooth via the previously described surgical approach was scheduled to take place with the administration of nasal endotracheal general anesthesia. Because it is easier to overcome unexpected problems, such as root tip curvature, ankylosis to the lateral nasal wall, and other factors that cause difficulties in the surgical removal of a tooth, an intraoral, rather than a transnasal, approach was preferred (Figure 3). After exposure of the piriform rim, bone overlying the nasal mucosa and inferior turbinate was removed, and the turbinate was explored via the use of a lateral approach. The impacted tooth was exposed, luxated, and removed. Postoperatively, there were no complications after 3 months follow-up.

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Case Report



Figure 1. Panoramic Radiography Shows the Impacted Canine (Arrow) Located High in the Maxilla



Figure 2. Coronal CT Scan Demonstrating the Impacted Canine (Arrow) Located Horizontally in the Left Inferior Turbinate

3. Discussion

Ectopic tooth eruptions have been reported to occur at a variety of maxillofacial sites, including the mandibular condyle and coronoid process, (2) the maxillary sinus, (3) the orbit, (4) the nasal cavity, (5) and through the skin (6). Ectopic teeth may be deciduous, permanent, or supernumerary. Although the etiology of ectopic eruption remains unclear, many theories have been suggested, including trauma, infection, cyst, tumor, crowding, and developmental abnormalities (1, 3, 7). The ectopic eruption of teeth into the nasal cavity is rare and occurs mostly in the floor of the nose. To the author's knowledge, no such case of tooth eruption into the inferior turbinate has been reported to

date.

In most of the reported cases, trauma or a pathologic lesion was the cause of tooth migration into an unusual site. In the case documented in this article, however, such etiologic factors were absent, thereby rendering this case rare and more interesting than the typical case. Intranasal teeth may be asymptomatic, or they may present with a variety of symptoms, including nasal obstruction, nasal deformity, epistaxis, foul-smelling rhinorrhea, nasolacrimal duct obstruction, facial pain, and skin sinus tract (1, 8, 9). The surgical removal of ectopic teeth is generally recommended to alleviate the signs and symptoms and to prevent complications.



Figure 3. Flap Design for Removal of Impacted Tooth from Inferior Turbinate via the Use of a Transoral Approach

This case report alerts surgeons to consider the possibility of an eruption of a tooth into the nasal cavity or inferior turbinate of the nose when panoramic radiography reveals an impacted canine tooth located high in the maxilla. Assessment of the tooth location via the use of CT scanning could be helpful in these situations.

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Footnotes

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References

- Carver DD, Peterson S, Owens T. Intranasal teeth: a case report. Oral Surg Oral Med Oral Pathol. 1990;70(6):804-5. [PubMed: 2263346].
- Schwimmer A, Keaveny JT, Caponigro C, Ragaini VE. Subcondylar impaction of a third molar resulting in chronic preauricular sinus: report of case. J Oral Surg. 1972;30(1):41–4. [PubMed: 4500327].
- Buyukkurt MC, Tozoglu S, Aras MH, Yolcu U. Ectopic eruption of a maxillary third molar tooth in the maxillary sinus: a case report. *J Contemp Dent Pract*. 2005;6(3):104–10. [PubMed: 16127478].
- Savundranayagam A. A migratory third molar erupting into the lower border of orbit causing blindness in the left eye. *Aust Dent J.* 1972;17(6):418-20. [PubMed: 4511976].
- 5. Pracy JP, Williams HO, Montgomery PQ. Nasal teeth. J Laryngol Otol. 1992;106(4):366-7. [PubMed: 1613354].
- Abdin Bey M. Eruption of a third molar through the skin. Quintessence Int (Berl). 1970;1(6):17-8. [PubMed: 5268659].
- Erkmen N, Olmez S, Onerci M. Supernumerary tooth in the maxillary sinus: case report. Aust Dent J. 1998;43(6):385–6. [PubMed: 9973705].
- Alexandrakis G, Hubbell RN, Aitken PA. Nasolacrimal duct obstruction secondary to ectopic teeth. *Ophthalmology*. 2000;**107**(1):189–92. [PubMed: 10647741].
- 9. Moreano EH, Zich DK, Goree JC, Graham SM. Nasal tooth. *Am J Otolaryngol*. 1998;**19**(2):124–6. [PubMed: 9550445].