



**Case Report**

ISSN: 2581-3218  
IJDR 2018; 3(2): 44-46  
© 2018, All rights reserved  
www.dentistryscience.com

## Ectopic Inverted Atypical Tooth in Nasal Cavity in a Patient with Cleft Lip and Palate

Volkan ÇİFTÇİ<sup>1</sup>, Özgür ERDOĞAN<sup>2</sup>, Muharrem Cem DOĞAN<sup>1</sup>

1. Faculty of Dentistry, Department of Pediatric Dentistry, Cukurova University, Adana, Turkey

2. Faculty of Dentistry, Department of Maxillo Facial Surgery, Okan University, Istanbul, Turkey

### Abstract

Ectopic eruption of a tooth in the nasal cavity is rarely seen in patients with cleft lip and palate. Since intranasal teeth have several dental and nasal complications, regular monitoring and timely intervention is required for a cleft lip and palate patient. In this report we present an intranasal permanent incisor tooth of a ten year-old-girl, who previously had two cleft lip and palate repair operations. The clinical appearance, the radiological findings and the treatment options are discussed.

**Keywords:** Intranasal tooth, Cleft lip, Palate.

### INTRODUCTION

Ectopic tooth eruption has been reported in various oral and facial regions such as the maxillary sinus, [1] orbit, [2] palate, [3] condyle, [4] coronoid process, [5] and angulus mandible [6] Even though it is rare ectopic eruption in the nasal cavity has also been reported. [7] Cleft lip and palate is a congenital malformation that originates from embryologic or fetal developmental disturbances. Intranasal tooth eruption is a rare complication of cleft lip and palate.

In this case report, we described an intranasal permanent incisor tooth in ten-year-old female patient with cleft lip and palate.

### CASE REPORT

A ten-year-old female patient with cleft lip and palate was referred to Cukurova University Faculty of Dentistry, Department of Paediatric Dentistry complaining of a mass in the right nasal cavity. The patient had been operated twice in a plastic surgery clinic for repair of the cleft lip and palate at three months and eighteen months of age. The clinical and radiological examinations revealed atypical right upper permanent incisor tooth at the bottom of the right nasal cavity [Figure 1]. The tooth was in an inverted position and the nasal mucosa was perforated by the tooth [Figure 2]. The nasal mucosa around the tooth was hyperemic and the patient reported occasional bleeding from the associated nostril. There was no history of infection in the area. Bilateral scar formation existed as a result of the previous surgical access to the upper lip. There was no sign of an oro-nasal communication. Under endotracheal general anesthesia, the tooth was extracted via a mediolateral subcutaneous incision at the bottom of the right nasal cavity [Figure 3]. Subcutaneous and cutaneous tissues were closed in a primary fashion. The patient was discharged on the same day. Recovery was uneventful after one week.

### DISCUSSION

Endicott in 1934 reported the first case of an intranasal tooth eruption of a supernumerary tooth. Smith *et al.* [9] reported their two cases and reviewed a further 27 well documented cases. To our knowledge, only seven cases of intranasal tooth eruption associated with cleft lip and palate have been reported to date. [8,10-14,18]

Intranasal tooth eruption may cause a variety of complaints such as; a sense of a foreign body in the nose, nasal obstruction, recurrent epistaxis, nasal congestion, nasal discharge, oro-nasal fistula, serous or purulent rhinorrhea, chronic oronasal fistula and facial pain. [14]

**\*Corresponding author:**

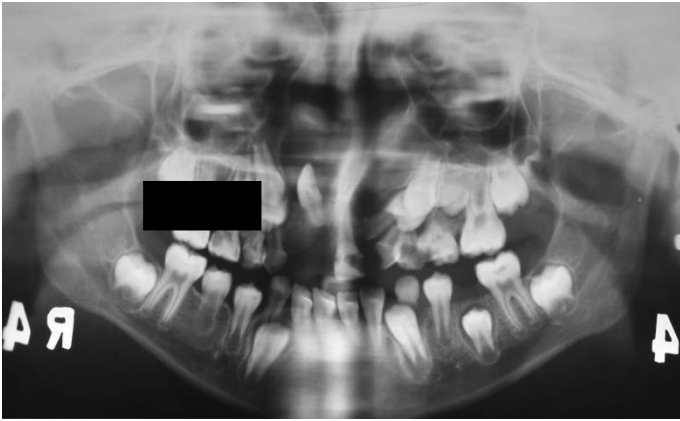
**Dr. Volkan ÇİFTÇİ**

Faculty of Dentistry,  
Department of Pediatric  
Dentistry, Cukurova University,  
Adana, Turkey

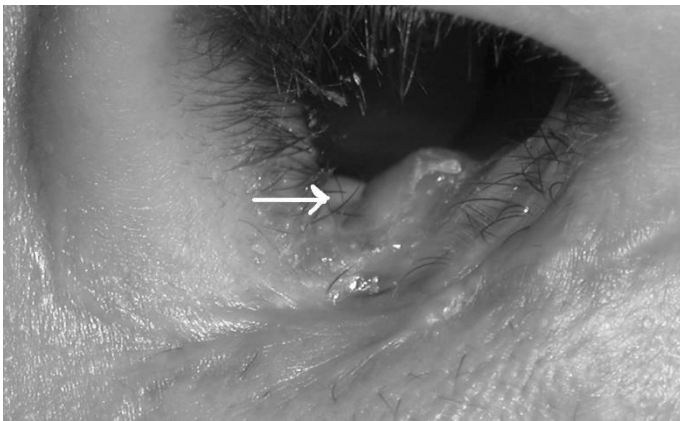
Email: volkangazi@yahoo.com,  
vciftci@cu.edu.tr

Tel: 90-322-3386600/3446

Fax: 90-322-3387331



**Figure 1:** Panoramic radiogram of the patient. Note the maxillary incisor tooth in an inverted position at the right premaxillary region.



**Figure 2:** Clinical appearance of the patient. The arrow indicates the ectopic tooth in the right nasal cavity.



**Figure 3:** The tooth after extraction.

The specimen was fixed and processed. H & E section of the received sample showed skeletal muscle tissue with intervening stroma. Numerous blood vessels of varying sizes were seen intermixed among the muscle fibres. Few vessels were attenuated in nature. Adipose tissue along with neural tissue was seen in adjacent areas. The histopathological diagnosis of 'Angiomatosis' was given.

An asymptomatic ectopic intranasal tooth may be noticed on routine clinical and radiological examinations. Similar number of cases were reported in right and left nasal cavities and no site predilection was shown for intranasal teeth.<sup>[13]</sup> In two cases, ectopic teeth were found in the nasal cavities bilaterally.<sup>[10,16]</sup>

Cleft palate patients usually have disturbances in dental and alveolar structures at the cleft sites. Consequently, teeth may be missed, deformed, divided, or displaced.<sup>[14]</sup> Incomplete union of the

embryological alveolar processes may lead to displacement of the tooth germ.<sup>[13]</sup> Although several hypothesis have been proposed, the exact etiology is unclear.

In a retrospective study<sup>[17]</sup>, the prevalence of intranasal ectopic teeth with complete unilateral and bilateral cleft lip and palate was compared. The authors stated a greater prevalence for bilateral cleft patients compared to unilateral cases, which was found 0.61% and 0.40% respectively.

A treatment option for an intranasal tooth might be bringing the tooth to occlusion via orthodontic forces or transplantation to the alveolar arch. We did not prefer orthodontic treatment, because of the inverted position of the tooth and the lack of surrounding bone. Transplanting the tooth into the maxillary arch after extraction may result in ankylosis or root resorption of the tooth. We extracted the tooth due to the poor prospect of conservative treatment and possible nasal complications.

### CONCLUSION

In conclusion, intranasal tooth eruption is a complication of cleft lip and palate. Since the condition may cause several nasal and dental complications and compromise dento alveolar growth, regular monitoring and timely intervention is critical for a cleft lip and palate patient.

### REFERENCES

1. Prasanna NM, Vecchio SR. Dentigerous cysts. *Can J Otolaryngol* 1974;3: 625-629.
2. Savundranayagan A. A migratory third molar erupting into the lower border of the orbit causing blindness in the left eye. *Aust Dent J* 1972;17:418-420.
3. Gans BJ. Ectopic tooth: report of a case. *J Oral Surg Anesth* 1962;20:435-437.
4. Schwimmer A, Keaveny JT, Caponigro C, Ragaini VE. Subcondylar impaction of third molar resulting in chronic preauricular sinus: report of case. *J Oral Surgery* 1972;30:41-44.
5. Sutton PR. Migrating nonerupted mandibular premolars: a case of migration into coronoid process. *J Oral Surg Oral Med Oral Pathol* 1968;25:87-98.
6. Kumar Dash J, Mohapatra M, Mishra L. Extraoral inverted teeth eruption: a case report. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2004;98(1):37-39.
7. Dayal PK, Dewan SK, Bihani VK, Dave CJ. Eruption of a tooth into the nasal cavity due to osteomyelitis. *J Laryngol Otol* 1981;95:509-512.
8. Endicott CL. A case of a supernumerary incisor erupting into the nose. *Br Dent J* 1934;56:385-386.
9. Smith RA, Gordon NC, Luchi SF. Intranasal teeth. Report of two cases and review of the literature. *Oral Surg Oral Med Oral Pathol* 1979;47:120-122.
10. Srivastava RP, Pradhan AC, Yadav VNS. Tooth in nasal cavity: a case report of a cleft lip and palate. *J Indian Dent Assoc* 1977;49:145-146.
11. King NM, Lee AM. An intranasal tooth in a patient with a cleft lip and palate: report of case. *J Am Dent Assoc* 1987;114:475-478.
12. Ranalli DN, McWilliams BJ, Garrett WS. Tooth and foreign object in the nasal fossa of a child with a cleft: a case report. *Pediatr Dent* 1990;12:183-184.
13. Yeung KH, Lee KH. Intranasal tooth in a patient with a cleft lip and alveolus. *Cleft Palate Craniofac J* 1996; 33(2):157-159.
14. Gupta YK, Shah N. Intranasal tooth as a complication of cleft lip and alveolus in a four year old child: case report and literature review. *Int J Paediatr Dent* 2001; 11(3):221-224.
15. Moreano EH, Zich DK, Goree JC, Graham SM. Nasal tooth. *Am J Otolaryngol* 1998; 19:124-126.
16. Martinson FD, Cockshot WP. Ectopic nasal dentition. *Clin Radiol* 1972; 23:451-454.

17. Medeiros AS, Gomide MR, Costa B, Carrara CF, das Neves LT. Prevalence of intranasal ectopic teeth in children with complete unilateral and bilateral cleft lip and palate. *Cleft Palate Craniofac J* 2000;37 (3):271-3.
18. Dalben Gda S, Vargas VP, Barbosa BA, Gomide MR, Consolaro A. Intranasal tooth and associated rhinolith in a patient with cleft lip and palate. *Ear Nose Throat J*. 2013;92(3):10-4.