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Case Report Ectopic intranasal tooth in a child with labiopalatoschizis: A rare case

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Abstract

Ectopic teeth is a rare case in clinical practice. Intranasal teeth is particularly related to osteomyelitis, traumatic impaction and squamous cell carcinoma. Surgery is chosen to prevent these complications. This case report presents a 16 year old boy with ectopic intranasal tooth and labiopalatoschizis. The patient came with epistaxis as the major symptom. Endoscopic endonasal approach is the most common technique in patients with ectopic intranasal teeth due to its safety and outcomes are cosmetically satisfying.

Keywords: intranasal teeth, labiopalatoschizis, ectopic tooth

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Introduction

Ectopic tooth is a rare case in clinical practice. The locations may vary and the most common site is maxillary sinus and palate. Some cases are found in mandibular condyle, coronoid process, orbits, intranasal and facial skin [1,4] Intranasal teeth is particularly related to osteomyelitis, traumatic impaction and squamous cell carcinoma. Signs and symptoms of intranasal ectopic teeth may vary from asymptomatic to chronic nasal obstruction and rhinosinusitis. Surgery is the main stay of treatment to prevent complications such as abscess, perforation or osteomyelitis [5]. The surgery chosen maybe either endoscopic endonasal, conventional endonasal or transoral approach. The endonasal method is the most preferred because of excellent lighting, shorter time of surgery, better visualization, and good dissection [6]. Here we present an intranasal ectopic tooth in child with labiopalatoschizis(Picture 1).



Picture 1. Abnormality shown during intraoral examination

A 16- year- old male presented to our ENT clinic with symptom of recurrent epistaxis especially during cold weather. The patient had no other symptoms. He has no obvious facial abnormality. And he did not seek medical help. The patient has no history of trauma facial and head surgery, facial and head tumor or other relevant history related to his nose. During general examination, the patient looked healthy, had no difficulties in breathing, no fever and all of the vital signs were normal.

We performed intraoral and intranasal examination and we identified teeth in the nostril and defect in anterior maxilla. The patient was then referred panoramic x/ray (picture 2&3) and we could see teeth germs 21,22 and supernumerary teeth in superior aspect of incisors 61,62.



Picture 2. Nasoendoscopy result. Nasoendoscopy showed four whitish foreign body (teeth) embedded in left nostril. A. Floor of the nasal cavitiy & anterior nasal septum. B. Posterior nasal septum.



Picture 3. Panoramic result. Panoramic showed teeth germs 21,22 and supernumerary teeth in superior aspect of incisors 61,62.



Picture 4. Extracted teeth from nasal cavity.

Due to repetitive epistaxis and aberration in the nasal mucosa, we performed surgery to extract the teeth. The teeth were extracted under general anesthesia. The teeth were found in the dental septum and the extraction process was guided by endoscopy. Before extraction, we infiltrated lidocaine and epinephrine around the teeth. Tooth extraction was then carried out from the nasal cavity by making a small incision in the nasal mucosa so that the teeth covered by the mucosa can be seen clearly. Extraction was carried out with forcep one by one until all were removed. After extraction, we sutured the incision with plain catgut size 3.0. The teeth in between the maxilla crest were extracted without endoscope and a concommittent oro-nasal defect could be seen. The defect was then sutured. The patient was then observed after the surgery, and there were no complications during post operative evaluation.

Discussion

The literature agrees that the most common treatment for intranasal teeth is early surgical extraction to prevent complications such as rhinosinusitis, osteomyelitis, dacryocystitis, nasal septal abscess or perforation, oronasal or intraoral fistula, aspergillosis, and nasal deformity. The extraction of intranasal teeth can be guided by endoscopy for clear visualization to minimize injury to nearby structures [7-9].

There are several approaches for surgery including endoscopic endonasal, conventional endonasal, or transoral approach. Choice of surgery depends on the experience of the surgeon, patient's age, presence of a bony socket, and depth of eruption. When endoscopic surgery is not feasible, the next choice must be conventional surgery. Endoscopic approach is widely known to be safer and more efficient technique than conventional surgery [10]

In our case, we used endoscopic endonasal approach for extracting the teeth. It provided excellent lighting, shorter time of surgery, better visualization, and precise dissection. It also offered better cosmetic outcome [10].

Conclusion

Endoscopy endonasal approach is the most common technique in patients with ectopic intranasal teeth due to its safety and outcomes. This technique is really helpful during surgery and the result is cosmetically satisfied.

Declaration

Ethical considerations

The study was conducted after securing ethical clearance from Bioethic Commision of Sultan Agung Islam University (UNISSULA) (letter no. 96/II/2023/ Komisi Bioetik). Since the study used secondary data, waiver of consent was obtained from Oral Surgery Department and Otolaryngology Head and Neck Department.

Competing interests:

The authors declare that they have no known competing interests.

Authors contributions

Data collection : Rano Aditomo, Yayun Siti Rochmah. Manuscript preparation : Gabrina Selvi Yanuarista. Translator: Rano Aditomo, Gabrina Selvi Yanuarista. Supervisor: Rano Aditomo, Yayun Siti Rochmah.

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