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ECTOPIC INVERTED TOOTH IN NASAL CAVITY IN A PATIENT WITH CLEFT LIP AND PALATE (REPORT OF CASE)

Ectopic eruption of a tooth in the nasal cavity is rarely seen in patients with cleft lip and palate. 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.

Methods. The clinical appearance, the radiological findings and the treatment options are discussed.

Results. The tooth was extracted under general anesthesia and the patient was discharged uneventfully.

Conclusion. Since intranasal teeth have several dental and nasal complications, regular monitoring and timely intervention is required for a cleft lip and palate patient.

Keywords: intranasal tooth, cleft lip and 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 a 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 radiological examinations revealed a permanent incisor tooth at the bottom of the right nasal cavity (*Fig. 1*).

The tooth was in an inverted position and the nasal mucosa was perforated by the root of the tooth (*Fig. 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 (*Fig. 3*).

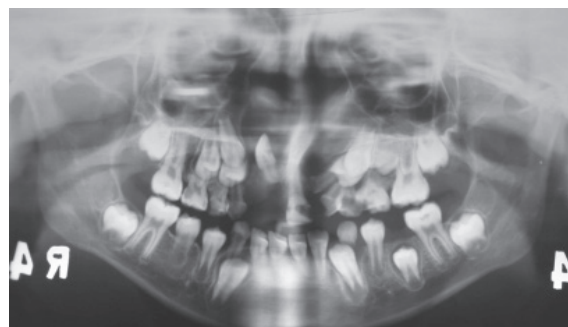


Figure 1. Panoramic radiogram of the patient. Note the maxillary incisor tooth in an inverted position at the right premaxillary region

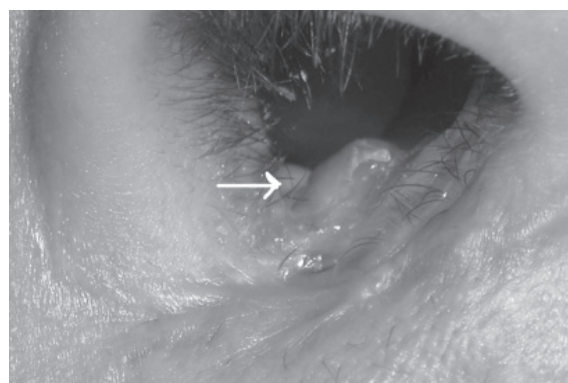


Figure 2. Clinical appearance of the patient. The arrow indicates the ectopic tooth in the right nasal cavity

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



Figure 3. The tooth after extraction

al. [9] reported their two cases and reviewed a further 27 well documented cases. To our knowledge, only six cases of intranasal tooth eruption associated with cleft lip and palate have been reported to date [8, 10–14].

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]. 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 [13]. In two cases, ectopic teeth were found in the nasal cavities bilaterally [10, 16].

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Cleft palate patients usually have disturbances in dental and alveolar structures at the cleft sites. Consequently, teeth may be missed, deformed, divided, or displaced [14]. Incomplete union of the embryological alveolar processes may lead to displacement of the tooth germ [13]. Although several hypothesis have been proposed, the exact etiology is unclear.

In a retrospective study [17], 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.

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 dentoalveolar growth, regular monitoring and timely intervention is critical for a cleft lip and palate patient.

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ПАТОЛОГІЧНЕ ПРОРІЗУВАННЯ ЗУБА В ПОРОЖНИНІ НОСА У ПАЦІЄНТІВ З НЕЗРОЩЕННЯМ ГУБИ І ПІДНЕБІННЯ

Патологічне прорізування зуба в порожнині носа рідко зустрічається у пацієнтів з незрощенням губи і піднебіння. У даній статті ми представляємо інтраназальний постійний різець у десятирічної дівчинки, у якої раніше були дві операції з відновлення незрощень губи і піднебіння.

Методи. Обговорюються клінічні прояви, радіологічні дані і варіанти лікування.

Результати. Зуб був видалений в умовах загального знеболювання, і пацієнт був виписаний без ускладнень.

Висновок. Оскільки інтраназальні зуби мають ряд ускладнень, регулярний моніторинг і своєчасне втручання потрібне для пацієнтів з незрощенням губи і піднебіння

Ключові слова: інтраназальний зуб, незрощення губи і піднебіння.

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ПАТОЛОГИЧЕСКОЕ ПРОРЕЗЫВАНИЕ ЗУБА В ПОЛОСТИ НОСА У ПАЦИЕНТОВ С НЕСРАЩЕНИЕМ ГУБЫ И НЕБА

Патологическое прорезывание зуба в полости носа редко встречается у пациентов с несращением губы и неба. В данной статье мы представляем интраназальный постоянный резец у десятилетней девочки, у которой ранее было две операции по восстановлению несращений губы и неба.

Методы. Обсуждаются клинические проявления, радиологические данные и варианты лечения.

Результаты. Зуб был удален в условиях общего обезболивания, и пациент был выписан без осложнений.

Вывод. Поскольку интраназальные зубы имеют ряд осложнений, регулярный мониторинг и своевременное вмешательство требуется для пациентов с несращением губы и неба.

Ключевые слова: интраназальный зуб, несращение губы и неба.