

## BILATERAL CONGENITALLY MISSING MANDIBULAR CANINES WITH SUPPLEMENTARY LOWER INCISOR - A CASE REPORT

Sivakami Ramaraj, BDS, MSc, DOrth RCS, MOrth RCS\* and Yousif Mirza, BDS\*\*

مریضة بعمر ١٤ سنة حولت إلى عيادة تقويم الأسنان من قبل طبيبها بسبب شكواها الرئيسية والتي هي ميل القواطع العلوية والتي تسيء إلى الناحية الجمالية . وكانت المريضة تظهر بصحة جيدة مع عدم وجود دليل على مرض فموي أو عام . وسيرتها السريرية تدل على أنها دخلت المستشفى مرة واحدة لازالة اللوزات . لم يسبق للمريضة ان احتاجت لأي معالجة سنية . أظهر الفحص الفموي الخارجي أن لدى المريضة نموذج عظمي صنف ثاني معتدل مع زيادة قليلة في الارتفاع الوجهي . وأظهر الفحص الفموي فقد الأسنان الآتية ١٨ ، ٢٨ ، ٣٣ ، ٣٨ ، ٤٣ ، ٤٨ ووجود ثنية سفلية زائدة . وأظهر فحص النسيج اللينة الفموية أنها طبيعية . ولدئى المريضة إطباق صنف ثاني في منطقة الأرحاء ، وصنف ثاني قسم أول في منطقة القواطع مع ١٠ ملم بروز علوي . أظهر الفحص الشعاعي أرحاء ثالثة غير بازغة ، وفقد أنياب سفلية وقواطع أمامية سفلية زائدة . وأكدت سجلات المريضة أنها لم تقلع أي سن سابقاً . ان انعدام ظهور بعض الأسنان الدائمة لأسباب خلقية يعتبر من الأطوار الطبيعية بالنسبة لأسنان معينة في الفكين العلوي والسفلي . ولكنه يعتبر من الأمور النادرة بالنسبة لبعض الأسنان مثل الأنياب السفلية . وهذه إحدى الحالات النادرة التي تبين فيها عدم وجود الأنياب السفلية لمريضة في الرابعة عشرة سنة من عمرها . لكون هذه الحالة من الحالات القليلة التي نشرت في السابق أحببنا أن ننشرها تفصيلاً . واننا لنأمل بأعداد دراسة عن الأسنان التي يكثر إنعدام ظهورها لأسباب خلقية في البحرين مستقبلاً .

Certain teeth have an increased tendency to be congenitally missing more often than the others. The rarest and least reported as missing are the mandibular canines. In this paper, we report a case of missing mandibular canines and the presence of a supplementary mandibular incisor.

### Introduction

The size, shape and number of teeth are under genetic control. In humans, changes in these dental morphological characteristics are not uncommon. Hypodontia (oligodontia) is a genetically caused anomaly although neither the genetic mechanism nor mode of genetic transfer of the anomaly is clear.<sup>1</sup> The anomaly is however associated with known syndromes such as ectodermal dysplasia

and Down's syndrome.<sup>2</sup> Hypodontia affects females more than males<sup>3</sup> and its prevalence is 0.1-0.9% in primary dentition and 3.5-6.5% in permanent dentition.<sup>2</sup> Although any tooth may be congenitally missing, there is a greater tendency for certain teeth to be missing more frequently than others. The most frequently missing teeth are the third molars, upper lateral incisors, second premolars and lower central incisors.<sup>4</sup> Missing canines are rare, this is particularly so of the mandibular canine.<sup>5</sup>

A review of the English literature disclosed a report on congenitally missing maxillary canines in two cases.<sup>6</sup> In this paper, we report a case of congenitally missing bilateral mandibular canines and the presence of one supplementary lower incisor.

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Consultant Orthodontist, Al Naim Health Center

\*\*Rotating Intern in Orthodontics, Dental Department, Al Naim Health Center, Ministry of Health, P.O. Box 12, Bahrain.

Address reprint requests to: Dr. Y. Mirza

**Case History**

A 14-year-old female [Fig. 1], with a chief complaint of proclination of upper incisors that compromised her aesthetics, was referred to our Orthodontics Clinic by a dentist. She appeared healthy with no evidence of obvious systemic or oral diseases. She gave a history of one admission to a hospital for tonsillectomy. She had no previous dental treatment of any sort before she saw the dentist who referred her to our Orthodontics Clinic. The information was confirmed by her mother.

**Clinical Examination**

Extraoral examination showed a true lateral convex profile suggestive of a mild Class II skeletal pattern with slightly increased lower facial height [Fig. 2]. Intraoral examination revealed missing 18, 28, 33, 38, 43, 48 and the presence of a supernumerary lower incisor [Figs. 3,4]. Intraoral soft tissues appeared normal. She had a Class II molar relation and Class II Division 1 incisal relation with a 10 mm overjet [Figs. 4,5,6].

**Radiographic Examination**

Routine panoramic view [Fig.7] revealed unerupted third molars, missing lower canines and a supernumerary lower incisor. It was confirmed from the patient's record at her health center that she had no previous dental extractions.



Figures 1 and 2. Slight asymmetry of the face with convex facial profile indicating a mild Class II skeletal pattern.

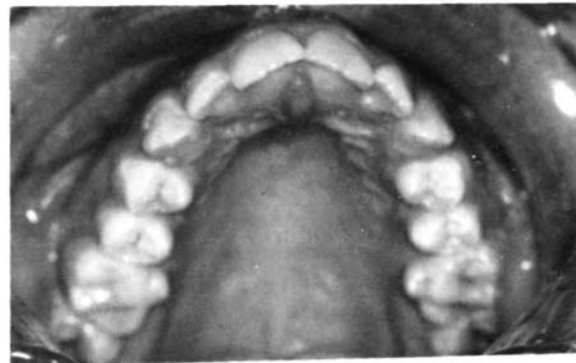


Figure 3. Upper arch with mild crowding of anteriors.



Figure 4. Lower arch with bilateral missing canines and supernumerary incisor.



Figure 5. Class II division I incisal relation with 10 mm overjet.



Figure 6. Upper and lower midlines are not coincident. A tooth is in the lower midline.

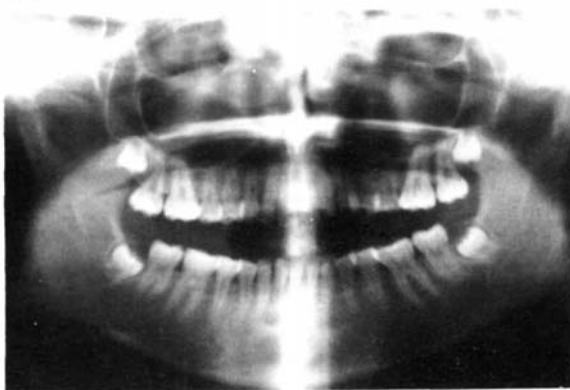


Figure 7. Panoramic view showing missing lower canines and the presence of a supernumerary lower incisor and unerupted third molars.

### Discussion

Supernumerary teeth, hypodontia, megadontia and microdontia have all been associated with genetic and environmental etiological factors. It is rare to see congenitally missing mandibular canines. This case which was associated with the presence of a supplementary mandibular incisor was equally a rare case.

The incidence of congenitally missing teeth have been reported in various populations (Table 1). Similar information on Bahrain had not been published. In the orthodontics records of our clinic, the case described in this paper was the first case of congenitally missing mandibular canines. The case might encourage a future study in the incidence of congenitally missing teeth in Bahrain.

### References

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