

Agensis of Bilateral permanent upper canines (Case report)

Agenéza bilaterálnych trvalých horných očných zubov (Kazuistika)

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Abstract

Introduction: Generally, incidence of missed teeth (Hypodontia) is not unusual. Hypodontia is often caused by familial reasons, and can also be associated with genetic disorders such as ectodermal dysplasia, Down syndrome or cleft lip and palate. Exclusive missing of both maxillary canines is an extremely rare occurrence and only a few cases have been reported in the literature.

Case report: A 33 year old male patient, suffering from mild form of Behçet's disease and no other medical problems. The patient complained from a cosmetic problem which is dissatisfaction of his smile because of missing both upper permanent canines and still has small deciduous both upper canines.

Conclusion: Agensis of permanent canines is very rare. It leaves the deciduous canines commonly in good condition if patient has good oral hygiene. The treatment is little complicated. It's a combination between the correction to normal appearance and the relatively high cost.

Key words: Agensis of teeth, Hypodontia, Behçet's disease.

Abstrakt

Úvod: Všeobecne platí, že výskyt hypodoncie (chýbajúce zuby) nie je neobvyklý. Hypodontia je často spojená s rodinnou anamnézou a tiež s genetickými poruchami, ako ektodermálna dysplázia, Downov syndróm, alebo rásštep pery a podnebia. Absencia oboch horných očných zubov je mimoriadne zriedkavá a v literatúre bolo opísaných iba niekoľko prípadov.

Kazuistika: 33-ročný pacient trpiaci miernou formou Behçetovej choroby nemal žiadne iné zdravotné problémy. Mal estetický problém – bol nespokojný s úsmevom kvôli chýbajúcim trvalým horným očným zubom, pretože na ich mieste ešte stále boli malé mliečne očné zuby.

Záver: Agenéza trvalých očných zubov je veľmi zriedkavá. Bežne počas nej dochádza k tomu, že mliečne očné zuby zostanú zachované, pokiaľ pacient dodržiava dobrú ústnu hygienu. Liečba je stredne komplikovaná. Zahŕňa kombináciu korekcie normálneho vzhľadu a relatívne vysokých nákladov.

Kľúčové slová: agenéza zubov, hypodontia, Behçetova choroba.

Introduction

Generally, incidence of missed teeth (Hypodontia) is not unusual. The most common missing teeth are the wisdom teeth (25 – 35 %) of population, the permanent upper lateral incisors (2 %), the lower second premolars (3 %), or the upper second premolar, with a higher prevalence in females than in males [1, 3]. The prevalence of missing primary teeth is found at 0.1 – 0.9 % of population. Excluding the wisdom teeth, missing permanent dentition accounts for 3.5 – 6.5 % of population [7, 8].

30 – 50 % of people with missing primary teeth will have in the future missing permanent teeth.

The overall prevalence of hypodontia was found to be 6.4 %, with noticed highest occurrence in Africa (13.4 %). There is an increased incidence of hypodontia in females than in males [6].

Hypodontia is often caused by familial reasons, and can also be associated with genetic disorders such as ectodermal dysplasia or Down syndrome. Hypodontia can also be found in people with cleft lip and plate [1].

Exclusive missing of both maxillary canines is an extremely rare occurrence and only a few cases have been reported. Previous studies showed that the prevalence of maxillary canine agenesis varies between 0.07 and 0.13 % and in the Indian population is totally absent [4].

Behçet's disease is known to be associated with mouth ulcers but, there is no evidence until now confirms that it is with strong relationship with hypodontia [2].

Case report: A 33 year old male patient working in trading company referred to our Oral and Maxillofacial clinic of Princes Basma Hospital in Irbid in the north of Jordan, suffering from mild form of Behçet's disease and no other medical problems.

The patient complaining from esthetic appearance of his smile because of missing both upper permanent canines and still has small deciduous both upper canines. Other dentist resolved the shape of rotated both upper lateral incisors by maintaining porcelain crowns to improve the esthetic problem and left the deciduous upper canines as they are (See Fig. 1).

We ordered OPG to be sure that the missed teeth are the permanent canines not the lateral incisors as is the usual incidence (See Fig. 2).

The crowned teeth according to length of their roots confirmed that they are upper lateral incisors and not crowned permanent canines and, the upper bilateral permanent canines are truly missed.



Fig. 1. Patient photo

Obr. 1. Fotografia pacienata



Fig. 2. Orthopantomogram (OPG)

Obr. 2. Ortodontomogram (OPG)

Our suggestion for this complain was to extract the both upper deciduous canines and to remove the two crowns and replace them by fixed bridges on both sides each one of three units, crowning the lateral incisor and first premolar with pontic replacing the space of absent permanent canine, taking the anatomic shape of normal upper permanent canine and so, we can improve the normal appearance of his smile.

Because of the high cost of the treatment, the patient preferred to postpone treatment plan to the close future.

Discussion

Hypodontia is sometimes related to another syndromes [4]. Hypodontia is often seen in people suffering Down syndrome [9]. It seems that congenital missed teeth usually seen in females and in the permanent dentition. It is not conclusive whether it tends to occur more in the upper or lower jaw and also in the anterior versus posterior segments [10].

Since 2003 we did not observe any case of missing permanent canine, which is mean that it has very low incidence in our population in HKJ. The question is, is it a coincidence in our patient that hypodontia of permanent canines related to Behçet's disease or not. In the literature this is the first case of this combination.

In Indian population agenesis of permanent canines is very rare; they reported only two cases despite the huge number of whole population [5].

Haselden et al. (2001) reported a longer survival rate of primary canines without permanent successors [5] and we noticed in our case that, deciduous upper canines are still in good condition.

Conclusion

Agenesis of permanent canines is very rare. It leaves the deciduous canines commonly in good condition if patient has good oral hygiene.

Agenesis of teeth generally is not unusual condition and it is strongly related to some syndromes but it is also often noticed in normal patients.

The treatment is little complicated, it is a combination between the correction to normal appearance and the relatively high cost.

Conflict of interest: We have no conflicts of interest to disclose.

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