Atatürk Üniv. Diş Hek. Fak. Derg. Cilt:19, Sayı: 3, Yıl: 2009, Sayfa: 227-228

EDİTÖRE MEKTUP LETTER TO THE EDITOR

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TO THE EDITOR,

Supernumerary teeth, also called hyperdontia, may occur in both dentitions, unilaterally or bilaterally, and in one or both jaws. They have a greater predilection for certain areas, with over 90% of them occurring in the premaxilla, followed by the mandibular premolar and maxillary molar regions. The term of hypodontia is used when one to five teeth, excluding third molar, are absent. In many populations, most previous studies show that the most frequent missing teeth, excluding third molars, are either maxillary lateral incisor or mandibular second premolar.^{1,2} A recent epidemiological investigation³ performed on dental anomalies for the Turkish population reported that the maxillary lateral incisors were the most frequently missing permanent tooth with a frequency of 1.74%. However, the frequencies of missing mandibular incisors and supernumerary premolars were detected as 0.36% and 0.07%, respectively. The majority of the supernumerary premolars reported in surveys or during routine orthodontic treatment was detected radiographically as in the present case. Most of these supernumerary premolars remain unerupted or impacted, although some of them may erupt either buccal or lingual to the natural dentition, and some may cause impaction of

the normal premolars. From this point view, our case may be accepted because of missing lower central incisor tooth and supernumerary premolar observed lower frequencies in Turkish population. A combination of missing 2 upper lateral incisors and supernumerary premolar tooth was previously reported by Munns.⁴ This is similar to the present Case (figures 1 and 2), with the difference not to be included missing lower central incisor.



Figure 1. Clinical appearance and orthodontic models of the patient showing the concomitant hypo-hyperdontia.

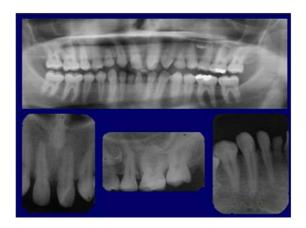


Figure 2. Panoramic and periapical radiographs of the patient showing the concomitant hypo-hyperdontia

CHH may affect the primary and/or the permanent dentition and may involve the maxilla and/or the mandible. There has been no definitive classification for this rare condition. The aetiology of CHH, a combination of two conditions that can be considered as opposite developmental disorders, is unknown. Genetic and environmental causes have



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been proposed and several attempts have been made to find a possible interpretation of the association of both numerical abnormalities. It may result from disturbances in migration, proliferation, and differentiation of neural crest cells or from interactions between the epithelial and mesenchymal cells during the initiation of odontogenesis. ^{5,6} When hypodontia and hyperdontia are located in the same jaw and quadrant, the association could be considered a transposition. ⁵ However, this theory can not explain CHH in different quadrants as in the present case.

The diagnosis of CHH was only an incidental finding as our case, which implies that a high proportion of these cases may remain undiagnosed in the community if no presenting symptoms are evident. Early diagnosis is imperative for successful management, because it permits the dental team to implement the most appropriate treatment options for both the sort-and the long term needs of the patient and to minimize future complications. Panoramic radiographs are essential for recognizing hypodontia and/or hyperdontia because a supernumerary or missing tooth can be identified by counting and identifying the entire dentition.5 Yours sincerely,

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EDİTÖRE MEKTUP

Eşzamanlı hipo-hiperdonti aynı bireyde doğumsal diş eksikliği ve diş fazlalığının bir arada görüldüğü bir durumdur. 13 yaşındaki sağlıklı bir erkek çocuk tüm bir dişsel değerlendirme için müracaat etti. Onun tıbbi ve dişsel anamnezi sorunsuzdu ve önceden aldığı bir travma hikayesi bulunmamaktaydı. Fiziksel ve ağız dışı muayene boyunca anormallik tespit edilmedi. Ağız içi muayene daimi üst yan kesici dişlerin ve alt sağ santral dişin eksikliğini ortaya koydu. Buna ilaveten, kalmış üst süt

köpek dişlerinin ve alt sağ süt kesici dişin varlığı dikkat çekiciydi. Radyografik inceleme üst sağ premolar dişler arasında yetersiz kök gelişimine sahip gömük artı premolar dişin varlığını gösterdi. Hasta dişsel görünüşünden duyduğu memnuniyetsizliği ifade etti ve tedavi seçenekleri görüşüldü. Kalmış süt dişleri ve artı gömük premolar diş çekildi. Daha sonra her iki arkta kaninlerin distalizasyonu sağlandı ve protetik iyileştirme yapıldı.

REFERENCES

- Sisman Y, Uysal T, Gelgor IE. Hypodontia. Does the prevalence and distribution pattern differ in orthodontic patients? Eur J Dent 2007;1:167-73.
- Peker I, Kaya E, Darendeliler-Yaman S. Clinic and radiographical evaluation of non-syndromic hypodontia and hyperdontia in permanent dentition. Med Oral Patol Oral Cir Bucal 2009;14:e393-7.
- Altug-Atac AT, Erdem D. Prevalence and distribution of dental anomalies in orthodontic patients. Am J Orthod Dentofacial Orthop 2007;131:510-4.
- 4. Munns D. A case of partial anodontia and supernumerary tooth present in the same jaw. Dent Pract Dent Rec 1967;18:34-7.
- Anthonappa RP, Lee CK, Yiu CK, King NM. Hypohyperdontia: literature review and report of seven cases. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2008;106:e24-30.

