

BIFID ROOTS IN A MANDIBULAR CANINE: REPORT OF AN UNUSUAL CASE

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التبدلات الشكلية، كوجود جذور إضافية في أسنان الإنسان هي حالات نادرة. وقد شوهد حالة نادرة أثناء الفحص الشعاعي الدوري، وهذه الحالة هي وجود ناب سفلي ذو جذرين لدى مريضة سعودية من أصل يمني راجعت عيادة كلية طب الأسنان في جامعة الملك سعود. وقد توثق في هذا التقرير احتمال حدوث مثل هذه الظاهرة في أسنان أخرى.

إن وجود أكثر من جذر في الأسنان السفلية الأمامية هي حالة نادرة وأن تكرار مثل هذه الشذوذات التشريحية لدى أسنان الإنسان لا يمكن تحديدها ما لم يبحث عنها طبيب الأسنان.

إذ أن وجود جذور إضافية يمكن أن يمر دون ملاحظة. ويتغير زاوية التصوير الشعاعي بمقدار ١٥ درجة يمكن إظهار الجذور الإضافية بوضوح. وأن ملاحظة الاختلاف في عدد الجذور وشكلها يعتبر عاملاً هاماً في عمليات علاج الجذور وقلع الأسنان.

Morphological variation, like additional roots in human dentition, are rare. An unusual case of bifid root in mandibular canine observed on routine radiographic examination is being reported here. A brief discussion on root anomalies in other teeth and a radiographic technique to detect the same has also been included in this report.

Introduction

While additional root canals in molar roots are common features, additional roots in mandibular anterior teeth are unusual.^{1,2,3} The frequency of this anatomical variation in human dentition is not known. Unless carefully observed, additional roots may escape one's attention. A case of bifid root in a mandibular permanent canine which was observed during routine radiographic examination of a patient is presented.

Case Report

A 28-year-old Saudi female of Yemenite origin reported for routine dental examination at the

College of Dentistry Clinic (Malaz Campus), King Saud University, Riyadh. A bifid root in the right mandibular canine was noted during the radiographic interpretation on the panoramic view of her jaws [Fig. 1]. A periapical view was subsequently taken which further revealed the bifidity of the root at the apical third of the mandibular canine [Fig. 2]. The opposite side did not show similar anomaly.

Discussion

Of all anterior single rooted teeth, the mandibular canine, occasionally, has double roots situated labio-lingually. The roots may be in juxtaposition or clearly separated. The tendency of doubling might appear as a deep groove on proximal root surfaces which divides the single root into labial and lingual components. An extensive study on variation in root canal morphology of mandibular incisors have been recently reported.⁴ In anterior teeth, mandibular canines may have more than one root canal. A bifurcated root canal is more common than a bifurcated root.⁴

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Figure 1. Panoramic view showing bifid roots at the apical third level in mandibular canine.



Figure 2. Periapical view showing bifid roots in mandibular canine.

Maxillary molar disto-buccal root may be represented by small twin roots of approximately equal size so that four distinct roots can be visualized. In maxillary premolars there may be three roots, two buccally and one palatally. The mandibular second premolar root also shows considerable morphological variation. The mandibular first molar may have an additional root. Instances of an additional root in the third molar are not uncommon. They escape attention in periapical views. A 15° change in angulation anteriorly brings out the additional root clearly. Awareness of variation in root morphology is significant for both endodontic and exodontic procedures.

References

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