

Maxillary molars: Retreatment for Root canal

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Abstract

The current correspondence portrays the endodontic retreatment of an uncommon four-established maxillary second molar. A patient was alluded to the dental work on mentioning an apicoectomy due to nonstop and long-lasting agony response a half year later the main endodontic treatment. The sent radiograph showed three filled root canal (one mesial, two distal) and four radio graphically superimposing roots (two mesial, two distal). Because of the analyzed on going apical periodontitis and in light of the apparent untreated root trench, the endodontically retreat the quadrangular tooth against the alluded apicoectomy.

Keywords: Maxillary molars, Root canal

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Introduction

Clear comprehension of dental life structures including root number and channel morphology is a fundamental essential in endodontic treatments. Specifically, expectation of uncommon physical varieties ought to be critical for endodontic subject matter experts. Such a dental inconsistency is the presence of two palatal roots in human maxillary second molars. Libfeld and Rotstein portrayed in 1200 explored teeth the recurrence of a four-established maxillary second molar at 0.4% [1]. Peikoff et al. distinguished in a review study, containing 520 maxillary second molars with finished endodontic medicines, that 1.4% of the Canadian patients had two palatal roots [2]. These outcomes were as of late affirmed by Martins et al. in 2018, who announced a comparative event rate in the Portuguese populace utilizing cone bar figured tomography [3]. In spite of this uncommon frequency, distributions concerning tooth life systems depict a few arrangements for four-established maxillary molars [4,5]. The principal portrayal was shown by Christie et al., who described maxillary molars with four roots (generally two buccal and palatal) as per their shape and level of partition of the palatal roots in three subtypes [6,7]. Baratto-Filho et al. proposed an extra class IV by exhibiting an endodontic instance of intertwined mesiobuccal and mesiopalatal roots [8]. Besides, Versiani et al. shown that Christie's characterization isn't attainable while concentrating on four-established second maxillary molars. Critically, before an endodontic retreatment, all accessible data and particularly radiographic assessments of the primary root trench treatment ought to be gotten. In the current correspondence, four roots are just apparent on the sent X-beam picture of the alluding partner.

In clinical case documentations, Christie's arrangement is ordinarily utilized for the depiction of quadrangular teeth. Christie et al. arranged four-attached maxillary molars as indicated by shape, degree, combination, and partition of the palatal roots. Because of four isolated roots and the equal running morphology of the buccal and palatal roots, the introduced tooth was recognized as type II. A further trademark for type II teeth is more limited roots, which clarifies the diminished working length for this situation report. Surprisingly, radiographic superimposition of the buccal and lingual roots in this sort can

prompt clinical confusion, for example, in the current case. Interestingly, Christie's sort I shows broadly unique, long, and convoluted palatal roots and the "cow horn"- molded buccal roots exhibit predominantly four separate apices on radiographs. Consequently, the analysis of this kind is more attainable for experienced endodontists. Type III maxillary molars are "tightened in root morphology with the MB, MP and DP trenches confined in a trap of root dentin." In radiographs of this kind, the DB root seems to remain solitary. In synopsis, the radiographic ID of quadrangular sort II molars could be testing and could confound a right determination. In any case, in demonstratively troublesome back districts, extra angulated radiographs could assist the dental specialist with deciding four-established molars.

Conclusion

Each dental expert and particularly endodontists ought to have profound information on all current physical variations and their radiographic qualities to keep away from treatment disappointments. Before the start of an endodontic retreatment, all accessible data of the primary root channel treatment and the radiographic history of the tooth of interest ought to be acquired for the recognizable proof of conceivable radicular anomalies.

References

1. Libfeld H, Rotstein I. Incidence of four-rooted maxillary second molars: literature review and radiographic survey of 1,200 teeth. *J Endodontics*. 1989;15(3):129–131.
2. Peikoff MD, Christie WH, Fogel HM. The maxillary second molar: variations in the number of roots and canals. *Int Endodontic J*. 1996;29(6):365–369.
3. Martins JNR, Marques D, Francisco H, Caramês J. Gender influence on the number of roots and root canal system configuration in human permanent teeth of a Portuguese subpopulation. *Quintessence International*. 2018;49(2):103–111.
4. Christie WH, Peikoff MD, Fogel HM. Maxillary molars with two palatal roots: a retrospective clinical study. *J Endodontics*. 1991;17(2):80–84.

5. Versiani MA, Pécora JD, De-Sousa-Neto MD. Root and root canal morphology of four-rooted maxillary second molars: a micro-computed tomography study. *J Endodontics*. 2012;38(7);977–982.
6. Carlsen O, Alexandersen V. Radix mesiolingualis and radix distolingualis in a collection of permanent maxillary molars. *Acta Odontologica Scandinavica*. 2000;58(5);229–236.
7. Carlsen O, Alexandersen V. Radix paramolaris and radix distomolaris in Danish permanent maxillary molars. *Acta Odontologica Scandinavica*. 1999;57(5);283–289.
8. Baratto-Filho F, Fariniuk LF, Ferreira EL, Pecora JD, Cruz-Filho AM, Sousa-Neto MD. Clinical and macroscopic study of maxillary molars with two palatal roots. *Int Endodontic J*. 2002;35(9):796–801.

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