



Case Report on Mandibular Second Molar with Two Mesial Roots

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Abstract

An instance of irregular root morphology is introduced to show anatomic varieties in mandibular second molars. The most widely recognized arrangement of mandibular second molar is to have two roots with three root waterways; anyway mandibular molars may have a wide range of blends. Endodontic treatment was acted in a mandibular second molar with 3 separate roots 2 found mesially and one distally. Radiographically each of the 3 root channels ended with individual foramina. Three openings or 3 autonomous waterways were found in the 3 separate roots, demonstrating an uncommon anatomic design. Searching for extra roots, trenches and strange morphology is a significant piece of effective endodontics as the information on their reality at times empower clinicians to treat a case that in any case may have finished in disappointment.

Keywords

Periodontal disease, Files, Cementum decontamination, Periodontal health

Introduction

One of the main perspectives in current endodontics is an exhaustive information on inner root life systems. This perspective, along with a right finding and proper cleaning and forming of the root trench framework, will normally prompt an effective result [1-2]. Slowey stressed that root waterway morphology was boundless in its fluctuation and that clinicians must know that anatomic varieties establish a noteworthy test to endodontic achievement. Undetected additional roots or root channels are a significant purpose behind disappointment of root waterway treatment.

An away from of root morphology and waterway life structures is a basic essential to accomplishing clean, purified and 3-dimensionally obturated root trench frameworks. A large number of the difficulties looked during root trench treatment might be straightforwardly credited to a lacking comprehension of the tooth morphology [2-3]. Human molars show impressive anatomic variety and variations from the norm as for number of roots and root trenches. Bizarre tooth life systems related with the mandibular molars has been researched in a few examinations.

Monitoring has contemplated the root channel life systems of 149 removed mandibular second molars utilizing clearing method. He found that 22% had single roots, 76% had two roots, and 2% had three roots. Costa Rocha et al. examined the outer and interior life

structures of 628 extricated mandibular first and second molars. Examination of mandibular second molars root demonstrated that 84.1% introduced two separate roots, 15.9% intertwined roots and 1.5% three roots. The life structures of mandibular second molar has racial varieties; utilizing periapical radiographs of 328 patients (105, Mongoloid beginning; 106, Negro; 117, Caucasian), Ferraz and Pécora announced a rate of three-established mandibular second molar in 2.8% of patients of Mongoloid inception, 1.8% of Negro source, and 1.7% Caucasian. Radiographs are a significant and vital guide in RCT, and precise radiographic strategies and legitimate understanding are fundamental for sound conclusion and treatment. The utilization of preoperative radiographs is the most ideal approach to distinguish and assess root channel morphology and life structures. Further radiographs ought to be taken at various points to affirm any variety in anatomical highlights.

With expanding reports of abnormal trench morphology, the clinician should know about this fluctuation. The reason for this clinical report is to show root waterway treatment of a mandibular second molar with two mesial roots distinguished during routine root channel treatment [2-3].

Case Report

A 27-year-old male patient was alluded with consistent torment of the privilege mandibular second molar for root channel therapy to the postgraduate Endodontic Department of Shiraz Dental School; Shiraz college of Medical Sciences. An overall dental professional had begun root trench treatment. The tooth was suggestive, with the patient whining of serious torment. A demonstrative radiograph uncovered a pulpomatized tooth with a transitory filling. Periodontal pockets were inside typical cutoff. The clinical history was noncontributory. Cautious assessment of the radiographs uncovered the chance of multiple roots.

The tooth was anesthetized and segregated with an elastic dam; the brief filling was eliminated utilizing a round jewel bramble, to increase great admittance to the mash chamber. Clinical assessment of the inner life structures affirmed the presence of three root channel holes, two found mesially and one distally. After looking into it further with $\times 4.5$ amplification kaleidoscopic loupes (Zeiss Eyemag Pro S; Carl Zeiss SpA, Arese, Italy) the mash chamber floor demonstrated 3 holes comparing to 3 root waterways. The working lengths of each waterway were assessed by methods for Root ZX electronic peak finder (J. Morita Corporation, Tokyo, Japan), at that point affirmed by a radiograph (distal canal=31 mm, mesial channels =29 and 27 mm). The working length estimation radiograph indicated three free root channels in three isolated roots

The trenches were at first instrumented with #15 nickel-titanium records (Dentsply Maillefer, Ballaigues, Switzerland) under water system with 2.5% sodium hypochlorite (NaOCl), coronal erupting was done utilizing # 2 and 3 Gates Glidden brambles (Dentsply, Maillefer, Ballaigues, Switzerland). All waterways were cleaned and arranged by hand with nickel-titanium scrapes utilizing a crown-down strategy like that portrayed by Saunders and Saunders.

Root trench therapy was booked more than two visits in view

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of the unpredictability of the root channel frameworks. Calcium hydroxide glue was utilized as an intracanal medicament. A sterile pellet was set in the mash chamber, and Coltosol (Coltene, Altstätten, Switzerland) was put over the entrance hole as a brief filling to forestall coronal spillage [4]. Multi week later, at the subsequent arrangement, all manifestations had vanished. Each of the three trenches were obturated with Tubli-seal (Kerr UK, Peterborough, UK) and along the side consolidated gutta-percha focuses. Last radiographs were taken to set up the nature of the obturation. After fruition of root trench treatment, the tooth loaded up with transitory concrete and alluded to remedial division for conclusive rebuilding [5].

Discussion

The advancement of different zones of dentistry requires exact investigation of morphology of human teeth so that better oral wellbeing can be given. The mandibular molars assume a foremost part in mastication and help to keep up the vertical component of the face, congruity of the dental curve, keeping up the cheeks and tongue in their position and in this manner keeping up the stomatognathic work.

Investigations of the inward and outer life structures of teeth have indicated that anatomical varieties can happen in all gathering types, in people and in different racial gatherings. Anatomical varieties ought not out of the ordinary as a successive chance. The clinician should accordingly be completely mindful of dental morphology so as to give better mind.

Most endodontic reading material and dental life systems books, depict the mandibular second molar as having two roots one mesial and one distal with two, three or four root channels. Notwithstanding, a mandibular second molar with a cone shaped root and wide single root channel is additionally announced. Weine expressed that this tooth may have more anatomical varieties than all other molar teeth. At the point when just one root is available, the root channel

framework may introduce just an expansive root waterway, two trenches that could possibly join, or a C-molded trench.

Analysts have indicated that the life systems of mandibular molars requires a lot of consideration since the quantity of roots and trenches are very factor. Maggiore et al. additionally noticed that the foundations of the mandibular second molar can fluctuate from one to three roots. Monitoring detailed three out of 149 mandibular second molars had three roots. Costa Rocha et al. in examination of mandibular second molars root went on the defensive out of an aggregate of 396 with three roots. The life structures of human teeth present racial varieties; as indicated by Ferraz and Pécora's report, three-established mandibular second molars were found in 3 teeth of Mongoloid root, 2 teeth of Negro beginning, and 2 of Caucasian cause patients.

Conclusion

Anatomic variety in the quantity of roots and root trenches can happen in any tooth. Assessment of clear radiographs taken from various points and cautious assessment of the inward life systems of teeth is fundamental. Root trench treatment is probably going to fizzle if additional roots or root waterways are not identified.

References

1. Hodge K (2004) Using files in periodontal therapy. *Dimens Dent Hyg* 2:16-18.
2. Pasquini R, Clark SM, Baradaran Sand Adams DF (1995) Periodontal files, a comparative study. *J Periodontol* 66:1040-1046.
3. Hoopla S (1985) Files provide desirable results in patient treatment procedures RDH8: 22-24.
4. Pattison AM and Pattison GL (2003) periodontal instrumentation transformed. *Dimens Dent Hyg* 1:18-22.
5. Marcaccini AM, PavaneloA, Nogueira AVB, Souza JAC, Porciúncula HF, et al. (2012) Morfometria study of the root anatomy in furcation area of mandibular first molars. *J Appl Oral Sci* 20:76-81.

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