Case report of maxillary first premolar with three root canals

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The root morphology including its canal anatomy varies significantly in different individuals and populations. Awareness of abnormal variation of the anatomy of the tooth is essential for clinical success. Maxillary premolars have a highly variable root canal morphology and generally presents with one or two roots and with one or two root canals but in a few cases three roots or three canals have been reported in the literature and have been documented as practically non-existent in Asia population. Concerning first maxillary premolars with three roots three anatomic variants exists; three separated roots, interfused roots. The presence of a third root or a total of three canals is reported in the literature with percentages ranging from 0 to 9.2 %. Maxillary premolars with three root canals were sometimes called small molars or “ridiculous.” The aim of this report is to describe the clinical management of one endodontic case of a maxillary first premolar with three canals in three separate roots using rotary instrumentation technique (RACE) (FKG Dentire swiss) and obturated with lateral condensation technique. It is concluded that Morphological variations in pulpal anatomy must be always considered before beginning treatment. Clinician should be aware of anatomical variations in maxillary premolars and be able to apply this knowledge in radiographic and clinical interpretation. Access cavity refinement maybe required for stress free entry to complex anatomy.

Biography

Duaa Abo Al Samh is an endodontic and restorative consultant at Prince Sultan Military Medical City (PSMMC) in Riyadh, Saudi Arabia. She completed her master degree in endodontics in 1996 from Dental College, King Saud University, Riyadh, Kingdom of Saudi Arabia. She finished her restorative board in 2004 from Saudi Council for Health Speciality in Riyadh, Kingdom of Saudi Arabia. Currently, she is a member of the Continuous Quality Improvement and Patient Safety (CQI & PS) at PSMMC.

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