

Non-surgical root canal treatment of a maxillary lateral incisor with triple dens in dente and five canals

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Aim To describe the clinical management of a maxillary lateral incisor with *dens in dente*, five canals and apical periodontitis.

Summary A case of a triple *dens invaginatus* in a maxillary lateral incisor with five root canals and apical periodontitis is presented. Five root canals were located which were named mesiobuccal MB, distobuccal DB, mesiopalatine MP, centropalatine CP, and distopalatine DP. The DB, CP and MP canals were necrotic, and MB and DP vital. Four canals converged to what seemed to be an "apical chamber". The canals were enlarged using hand files, irrigated with 1% sodium hypochlorite and PUI. Calcium hydroxide was placed into the canals. The patient missed his second appointment and did not re-scheduled. Eight months after the initial appointment the patient showed up, and presented an enamel fracture in the mesial-incisal angle. Once again the canals were hand filed, PUI with 1% sodium hypochlorite and calcium hydroxide filled. Three weeks later the canals were obturated with thermoplasticized gutta-percha by continuous wave technique. *Dens invaginatus* is a development anomaly presented with a complex anatomy. It's incidence goes from .04 % to 10%. To achieve success in each particular case when root canal therapy is needed in such teeth, the clinician should be aware of the diverse techniques available in order to diagnose, clean, shape, use intracanal dressing and filling.

Key Learning Points

- Despite it's complex internal anatomy *dens in dente* can be successfully treated with non-surgical root canal treatment.
- Because of bactericidal effect of calcium hydroxide it is a helpful intracanal dressing.

