

증례(근관치료학)

Endodontic treatment of a maxillary central incisor afflicted with canal calcification and external root resorption

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I. Introduction

Traumatic damage to the root surface along with an infection of the root canal system results in a loss of cementum. Necrosis of the pulp due to such trauma induces inflammation of the periodontal ligaments, which may cause external root resorption. A chronic inflammation of the pulp may also incite the calcification of root canals, making canal navigation difficult. This case report describes the treatment of a left maxillary central incisor with calcified canals and external root resorption

II. Case Presentation

1. Chief complaint : I had trauma on maxillary incisors. Local dental hospital dentist said my left maxillary central incisor lost vitality
2. Sex/age: M/20
3. Past Medical/Dental History: Trauma (Fall on the stairs), #12-#21 subluxation
4. Present Illness : No reaction to EPT or cold stick on #12 & #21
5. Impression : Necrotic pulp tissue on #12 & #21
6. Tx Plan : Root Canal Treatment of #21

III. Discussion and conclusion

Regarding necrotic pulp due to trauma, an endodontic treatment is indicated in order to remove the source of infection and disinfect the canals. Root resorption can be successfully halted if treatment is initiated within 7-10 days of trauma. In cases where more than 10 days have elapsed following traumatic damage and external root resorption can be observed, a prolonged use of calcium hydroxide medicament is recommended. A follow-up appointment should be carried out 1 month following initial treatment, and once every 3 months afterwards, in order to evaluate the status of the tooth. The canals can be obturated upon healing of adjacent bone or when external root resorption has halted.

Treatment in this respective case was initiated approximately 4 months following initial trauma, which indicated the need for a prolonged period of canal medicament use and follow-up examinations until the tooth was deemed sufficient for obturation.