



Management of Complicated Crown Fracture with Intrusive Luxation of Anterior Tooth

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Clinical Image

A 40-year-old female with history of road accident one month back reported with fractured tooth. Oral examination revealed complicated tooth fracture of maxillary right central incisor (11) which was intruded in the socket (Figure 1). Pulp sensibility test showed negative response in maxillary right central (11) and lateral (12) incisors and normal response in maxillary left central incisor (21). Intra oral periapical radiograph revealed crestal bone loss and intruded 11, horizontal radiolucency at apical third in 21 suggestive of fracture line. 11 were coronally repositioned by around 2 mm using forceps. Tooth was stabilized with wire reinforced composite resin (Figure 2). Access preparation, cleaning and shaping along with endodontic irrigation was done in 11, 12 and calcium hydroxide intracanal medication was placed for 7 days. Root canal obturation was done by gutta percha and AH plus sealer. Splinting was extended up to 4 weeks. Post and core followed by full coverage restoration was done with ceramic crown. At 8 month follow up 11 was normal in relation to probing depth of gingival, mobility and 21 showed normal responses to pulp sensibility. In intrusive luxation the teeth are forcefully intruded into the bone with associated comminuting fracture of the socket [1]. Delayed repositioning of mature roots may initiate replacement resorption [2]. Splinting is generally recommended for 10-12 days so as not to hinder the functional stimulation that plays a role in repair of periodontium [3,4]. Since intrusive injuries require surgical repositioning of tooth with forceps, splinting is advisable for 4 weeks to allow the fracture bone to heal (Figure 3).

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Figure 1: Pre-operative.



Figure 2: Splinting.



Figure 3: Final ceramic restoration.

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