

TREATMENT MODALITIES OF FRACTURED MAXILLARY INCISORS WITH PULP EXPOSURE (Case report)

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Introduction

Maxillary permanent incisors are the most exposed teeth to dental injuries (especially central incisors) and are most frequent to population between 7 and 11 years. The most common lesions are crown fractures with pulp exposure. Treatment of these lesions depends on stage of root formation, the width of the perforation and the time passed from the injury. The aim of this study is to present treatment modalities depending on pulp condition and direct restoration of crown in one visit.

In this study will be presented two clinical cases of fractured maxillary incisors.

An 12-year-old boy presented with fractures in both maxillary central incisors resulting from a bicycle accident that occurred 48h earlier. The patient had been taken immediately to a clinician, performed conservative root canal treatment in two visits. In first visit was performed pulp extirpation, cleaning, widening the root canal and put temporary filling based on calcium hidroxiid and in second visit canal was filled with permanent filling and restored crowns with Gradia Direct composite.



white translucent Gradia Direct composite was placed at the gingival and middle third, and the anterior natural translucent composite was placed on the incisal third of teeth



surface texture were created using a diamond bur.



Final polishing

Second case was fractured maxillary first incisor, with fracture line in middle third with pulp exposure. Patient came in the clinic fifteen minutes after injury, root canal treatment was performed immediately, filled the canal in the same visit and restored the crown with the same composite restorative material



placing posterior A2 shade of Gradia Direct composite to create the lingual enamel layer



dentin replacement layer was formed by placing standard anterior shade A2 of the Gradia Direct composite to create the body and mammelons of teeth



a second dentin layer—this time in anterior Shade A1—was placed in the middle and incisal third of teeth

Conclusion

Restored teeth were evaluated for 12 months and showed adequate clinical and radiographic evolution. In relation to the aesthetic consideration, the outcome has been satisfactory. The treatment requires adequate knowledge about diagnosis, treatment plan and biological, aesthetical, functional and economic aspects