## Management of Avulsed Permanent Teeth With a Partial Denture

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#### Abstract

Traumatic dental injuries are common occurrences among children. This case report details the sequence of treatments of a 7-year-old female patient following traumatic avulsion and luxation of her permanent teeth #7 and #8 from the initial encounter in the pediatric emergency department to the subsequent follow-up visits spanning over 3 years. Treatment over those 3 years included: repositioning, pulpectomy, splinting, and apexification. Unfortunately, the teeth ultimately needed to be extracted, and a partial denture was fabricated and delivered.

#### Background

Traumatic dental injuries (TDIs) to permanent teeth are common among children, with crown fractures and luxations being the most prevalent types. Accurate diagnosis, treatment planning, consistent follow-up care and anticipatory guidance are crucial for achieving the best possible outcomes.



References

DiAngelis AJ, Andreasen JO, Ebeleseder KA et al. International Association of Dental Traumatology guidelines for the management of traumatic dental injuries: 1. Fractures and luxations of permanent teeth. Dent Traumatol 2012; 28:2-12.

#### Acknowledgements

Special thanks to Dr. MaryBeth Giacona, Dr. Madhu Mohan, Dr. Justin Dinowitz for providing invaluable support and contributions to this case report. Their guidance, provision of key details, and generous sharing of clinical images were instrumental in the development of this poster.

A 7-year-old female pt presented to Peds ED for evaluation of avulsion of tooth #8 on a Saturday. Patient had facial trauma after jumping on a bed and hitting her mouth, avulsing tooth #8 and laterally luxating #7. Patient's mother reported that a pediatric resident placed patient's #8 in "water". Patient did not report acute pain. Patient had a previous history of asthma, no current medications being taken, no known drug allergies.

Multiple pediatric dentists could not complete any treatment in a traditional clinic setting due to the child's severely uncooperative behavior. Due to patient's behavior and extent of treatment, the child was seen in the operating room (OR) under general anesthesia (GA) on Monday, two days after the trauma. In the OR, reimplantation of tooth #8, repositioning of #7, extraction of #C, splinting from #B to #9 with fish wire splint, pulpectomy of tooth #8 with CaOH was performed. Patient was followed up for 1, 3, 6 weeks, where an increase in periapical radiolucency was noted, and patient was referred to the endodontic clinic and apexification was initiated using CaOH. However, patient did not follow through with the apexification procedure and presented a year later as an emergency in our clinic due to pain in #7 and #8. At this time, teeth #7 and #8 were non-restorable and the teeth were extracted. A digital scan was completed and was used to fabricate a partial denture. Once this partial denture was delivered, the patient and the patient's mother were very satisfied.









### **Case Report**

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