



## **CASE REPORT**

### ***Reimplantation of Primary tooth – Case Report***

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#### ABSTRACT

**This article reports a clinical case of a primary tooth avulsion followed by dental reimplantation and endodontic treatment according to the established protocol for the treatment of traumatized primary teeth. A patient, 7 years of age, suffered the avulsion of tooth 63 because of road traffic accident. The child was given dental assistance within 30 min, and the avulsed tooth was stored in milk during the period. After radiographic examination, the tooth was reimplanted and splinted. This procedure was performed after obtained permission from mother. Endodontic treatment was implemented immediately before reimplantation.. The endodontic treatment consisted of root conditioning with APF gel followed by metaphex as obturating material. Fresh bleeding was induced in socket prior to reimplantation followed by splinting.**

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#### INTRODUCTION

Trauma is described as injury resulting from an external force. It is the leading health problem that children are facing today. Tooth avulsion are the second most common facial dental problem reported in hospitalized, pediatric trauma patients. Avulsion of a primary incisor is often associated with Luxation injuries to adjacent teeth fracture of the facial bone Laceration of the surrounding gingiva and lips. The Prevalence of Avulsion of primary teeth has been reported to comprise between 5.8% and 19.4% of all types of traumatic injuries to the primary dentition and 19.2% of luxation injuries only. It occurs most often in 2-4- year-old children. Affects boys more than girls. The maxillary primary central incisor is involved more than any other tooth, followed by maxillary lateral incisors and mandibular central incisors. epidemiological data clearly demonstrate that maxillary central and lateral incisors are the most frequently avulsed primary teeth, with an incidence of between 7 and 12%. And the canine is rarest among all anteriors.

#### CASE REPORT

A 07-year-old girl reported to the department of Pedodontics and preventive dentistry Rishiraj College of dental science and research center Bhopal with the chief complaint of pain and trauma in upper front tooth region of jaw since half hour back. As per the patient, she was apparently alright half hour back. Then she gives history of road traffic accident in there near by area because of the accident she had a fall because of which right upper front tooth was lost completely from the oral cavity also the upper lip was injured the right inner corner and also bleeding spot are present in chin and cheek region. While there was no history of convulsions or vomiting, there was a positive history of bleeding from the mouth due to injury..

#### **EXTRA-ORAL EXAMINATION**

Extra-oral examination on inspection revealed there were lacerations present on chin, lower margin of lower lip and at the lower corner of mouth. Pupillary reflexes were normal, swelling of upper and lower lips, bleeding from mouth, abrasions on the nose and chin region were also

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seen. Tenderness on palpation was present in maxillary and mandible anterior region of the face. and limited mouth opening were noticed.

### **INTRA ORAL EXAMINATION**

Intraoral examination under the soft tissue examination revealed laceration in upper lip. Under hard tissue examination all primary dentition were present. Missing tooth present in upper left front tooth region of jaw occlusal caries present lower left back tooth region of jaw and restored tooth present in lower right back region of jaw.

### **RADIOGRAPHIC EXAMINATION**

An (OPG) Orthopentamogram showed absence of maxillary left canine space region and the 1/3 root of permanent canine was not completed.

### **DIAGNOSIS**

Taking in to consideration the above mentioned clinical findings and radiographic features the patient was diagnosed to have avulsed teeth with diagnosed as a Ellis class 9 fracture w.r.t. 63

### **MANAGEMENT**

The principles of treating avulse primary tooth are partly related to the treatment of avulse permanent tooth. As the patient arrived in the hospital, immediate attention was given to injured lip along with the avulsed tooth, which was brought in milk as a storage media. Suturing was done by an oral surgeon, in the mean time intentional pulpectomy was performed extraorally, in which obturation is done by metapex with in 15 min. Surface root conditioning was done with APF gel. Extraction socket was flushed with saline followed by inducing bleeding. The reimplantation of tooth was done which is followed by splinting. Patient was kept on oral medication. Follow up was done after 7 days then after 21 days. Now the splinting was removed, with conformation of immobilization. Still patient is under observation.

### **DISCUSSION**

Maintenance of a normal anterior dentition, may relieve parental guilt or concerns that a child's self-esteem and social acceptance will be compromised by premature loss of a maxillary anterior. Evidence beyond the level of clinical opinion is not available to support concerns about self-esteem. Other benefits cited to justify reimplantation, such as Prevention of articulation problems, Impaired mastication, space maintenance, Prevention of tongue thrust. Additional treatment involve splinting and requires additional radiographs and local anesthetic to complete the procedure. Pulp treatment is virtually always required to prevent the development or progression of inflammatory root resorption. Pathological outcomes observed following primary incisor reimplantation included Dental abscesses, Root resorption, Ankylosis, Deflection of permanent incisors, Hypoplastic and morphological changes to permanent incisor Crowns. These outcomes require additional procedures, extraction of the reimplanted primary incisor.

### **CONCLUSION**

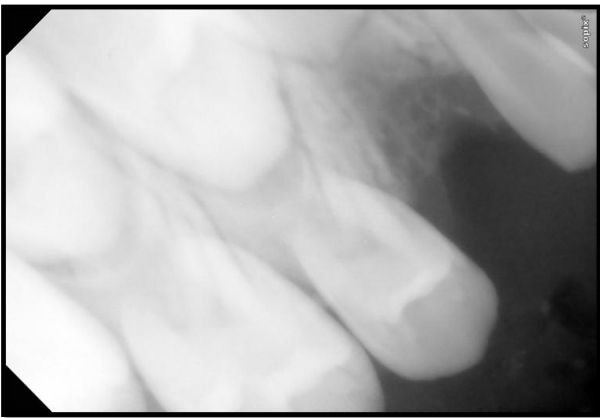
It appears that the authors of textbooks are correct to discourage reimplantation of primary incisors based on the low level of evidence to support the procedure and on the risk–benefit assessment of the outcomes. But, some authors of single case studies support and even recommend reimplantation.

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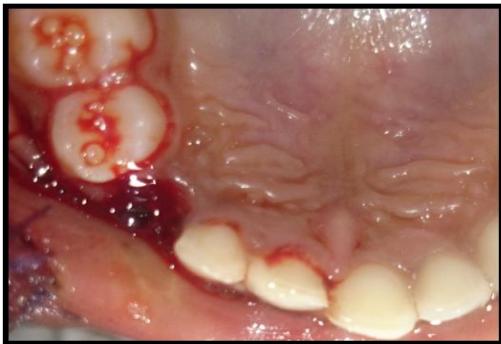
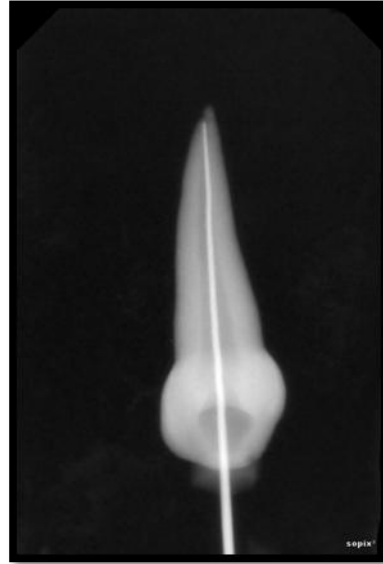
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FIGURES





Immediate suturing



Fresh bleeding induced