

Available online at www.sciencedirect.com

journal homepage: www.elsevier.com/locate/sdj

Case report

Delayed replantation of avulsed tooth with 15-hours extra-oral time: 3-year follow-up



D. Sardana*, A. Goyal, K. Gauba

Unit of Pedodontics and Preventive Dentistry Oral Health Sciences Center Post-graduate Institute of Medical Education and Research, Chandigarh, India

ARTICLE INFO

Keywords:

Avulsion
Delayed replantation
Trauma
Splint

ABSTRACT

Background: Avulsion is one of the most serious injuries of the tooth which is most commonly seen in young children and occurs in the upper front teeth. Immediate transplantation of the avulsed tooth is recommended treatment and results in good prognosis although this may not be always possible.

Case report: The present case highlights the 3-year follow-up of delayed replantation (after 15 h) of maxillary central incisor which was avulsed due to trauma. The complications seen in the present case were ankylosis and inflammatory resorption, but clinically the tooth was asymptomatic and maintains the esthetics of the individual signifying the importance of delayed replantation even after prolonged extra-oral time.

Clinical implications and conclusion: Although complications like ankylosis or root resorption may be unavoidable, delayed replantation of avulsed tooth may be a good alternative to prosthesis (implant or fixed partial denture) till the growth is completed due to preservation of the alveolar bone and psychological benefit to the patient. Also efforts should be made to educate and update children, teachers and parents regarding management of avulsed tooth at accident site and also the dentists regarding its management in dental office.

© 2014 Published by Elsevier B.V.

Introduction

Injury to the teeth and associated oro-facial structures is quite disturbing to the child and his parents due to contribution of these structures in esthetics and its subsequent psychological impact. Although all forms of injuries require some immediate attention and management, tooth avulsion (ex-articulation) is a special form of injury in which the prognosis is associated with the duration between the time the tooth is avulsed and when it is replanted [1,2]. Also this

form of injury is important because it most commonly involves maxillary central incisors [3] which makes a major esthetic contribution to the smile.

Although recommended, immediate transplantation of the avulsed tooth is not always possible due to the patient's concomitant injuries at the time of accident and lack of knowledge in the management of such injuries at the site of the accident [4]. The purpose of this case report is to report the 3-year follow-up of avulsed 11 which was replanted in the dental office after a period of 15 h.

*Corresponding author.

E-mail address: doc_divesh@yahoo.co.in (D. Sardana).

Case report

A 12-year female child reported to the unit of Pediatric Dentistry, Oral Health Sciences Center, PGIMER, Chandigarh with a chief complaint of broken upper front tooth due to trauma 15 hs back (Figs. 1 and 2). The trauma occurred while the child was playing in the park and there was no history of loss of consciousness or vomiting. The tooth was taken home wherein the tooth was placed in cold milk after half an hour of extra-oral dry time and taken to local dentist. The local dentist referred the patient to our department for subsequent treatment which was far away from the place and hence total extra-oral time for the avulsed tooth was 15 h. On examination, there were no other signs of injury intra-orally and extra-orally. Examination of the tooth socket did not reveal any fracture of the bony wall or tooth segment. An intra-oral periapical radiograph was taken to rule out any broken tooth or bony segment in the socket (Fig. 3). In the dental office, the root surface and the socket were washed with stream of saline and all the debris was removed gently. The root surface was also cleaned with soft pumice prophylaxis and subsequently kept in 2% sodium fluoride solution till the patient was prepared for the procedure of replantation. The tooth was placed in the socket under local anesthesia and splinting was done from canine to canine using multiflex wire for one month (Fig. 4). The occlusion of the patient was checked to verify that there were no pre-mature contacts while biting to avoid further injury to the adjacent periodontal tissues. Esthetics was restored by maintaining the incisal edge of the replanted tooth at same level as the adjacent tooth. A radiograph was also taken to verify the position of re-implanted tooth in the socket (Fig. 5). Access opening was



Fig. 1 – Pre-treatment photograph showing avulsed 11.



Fig. 2 – Pre-treatment photograph showing avulsed 11.



Fig. 3 – Pre-treatment radiograph.



Fig. 4 – Acid-etch composite splint from canine-to-canine.



Fig. 5 – Radiograph post-splinting to verify position of re-implanted tooth.

prepared on the same day and pulp extirpated from the canal. The canal was subsequently filled with calcium hydroxide and the chamber sealed with Glass ionomer cement (GIC). The patient was kept on antibiotics (Doxycycline 100 mg twice daily and Ibuprofen 400 mg thrice daily for 7

Download English Version:

<https://daneshyari.com/en/article/3837175>

Download Persian Version:

<https://daneshyari.com/article/3837175>

[Daneshyari.com](https://daneshyari.com)