

AVULSE DIŞLERİN REPLANTASYONU: OLGU BİLDİRİSİ

REPLANTATION OF AVULSED TEETH: A CASE REPORT

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ABSTRACT

The purpose of clinical study is replantation technique which used in the treatment of an avulsive teeth case. Case was avulsed right and left maxillary permanent central and upper right central incisor a 35-yr-old man suffering from a traumatic injury. The avulsed teeth were placed back into the socket with the help of finger pressure. Teeth were splinted with a semi rigid arch wire. Patient was advised to avoid biting on the splinted teeth and continue to brush the other teeth, only soft foods should be eaten and quitting acidic beverage consumption. After 4 weeks the splint was removed. The results of the treatment were teeth remained symptomless and showed no sign of discoloration, gum abscesses, pulp death, teeth pain and root resorption.

Key words: Dental trauma, Avulsed teeth, Replantation

ÖZET

Bu klinik çalışmanın amacı avulasyona uğramış dişlere uyguladığımız replantasyon tedavi tekniğidir. Otuz beş yaşındaki erkek hastada dental travma sonucu maksillar sağ, sol ve mandibular sağ daimi kesici dişler avulsuyona uğramıştı. Avülse dişler parmaklarla hafif basınçla alveol soketine yerleştirildi. Dişler yarı sert arch teli ile splinte edildi Hastaya splinte dişleri kullanmaması, diğer dişlerini fırçalamasını ve sadece yumuşak gıdalar yemesini asitli içecekleri tüketmemesi tavsiye edildi. Dört hafta sonra splint çıkarıldı. Tedavisi sonucunda dişlerde semptom ve renk değişikliği, dişeti apsesi, dişlerde devitelizasyon, ağrı ve kök rezorbsiyon gözlenmedi.

Anahtar Kelimeler: Dental travma, Avülsiyon, Replantasyon,

INTRODUCTION

When a whole tooth removed, as a result of trauma, from the socket it is named as avulsion. Management of avulsion tooth is replantation of the tooth back into socket within 20-30 min after injury.^{2, 9,10} It is important for the success of replantation in future. The immediate concern is to stabilize the tooth in its normal position to allow re-attachment and re-organization of the periodontal ligament support.⁸ The most common teeth to be avulsed are maxillary central incisors.⁴ The purpose of the study was to evaluate the healing results of avulsed and replanted permanent anterior teeth.

CASE REPORT

A 35-yr-old man, suffering from dental injury because of violence, he referred to the endodontic clinic at the School of Dentistry, Dicle University, Turkey in May 2004. The extra-oral examination revealed the swelling of the upper lip and laceration which was already sutured in our Surgery clinic. Clinical examination showed the loss of right and left maxillary permanent central and mandibular right central (**Fig. 1**). The panoramic radiograph showed the loss of the maxillary right and left central incisor, right mandibular central with a normal socket, and no evidence of jaw fracture was found (**Fig. 2**). Avulsed teeth were left in a dry plastic cup by the patient after

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the injury for about one hour (**Fig. 3**). Local anesthetic was administered and the blood clot was removed from the socket. Teeth were then reimplanted into their sockets with the help of finger pressure (**Fig. 4**).

The teeth were splinted with a 0.018 × 0.025 inch a semi rigid arch wire and bonded with composite for the following 4 weeks (**Fig. 5**). Patient was instructed about the bite plane usage, oral hygiene and quitting acidic beverage consumption. When the patient was seen after 2 month, his clinical examination revealed no problems (**Fig. 6**). During the following observation periods of 1and 2 months teeth did not exhibit endodontic lesions, discoloration, gum abscesses, teeth pain and inflammatory root resorption symptoms.

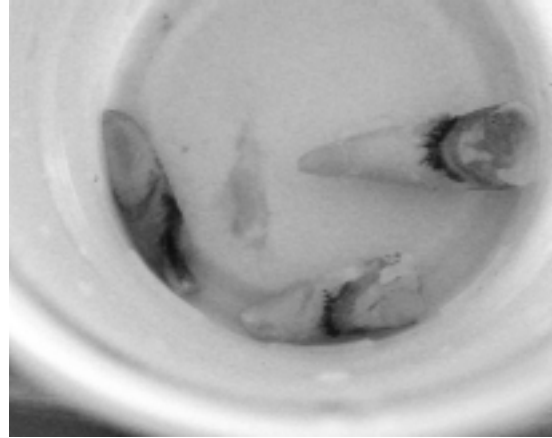


Figure 3: Avulsed permanent teeth

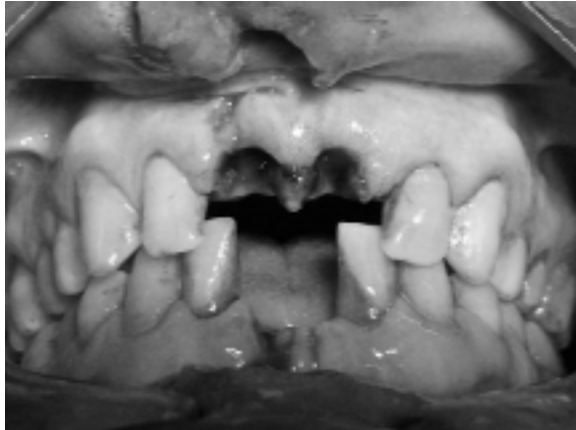


Figure 1: The first view of the case just as applied our clinic



Figure 4: Anterior view of the reimplanted incisor.



Figure 2: Initial panoramic radiograph



Figure 5a: The splinting of the reimplanted teeth to the adjacent teeth.

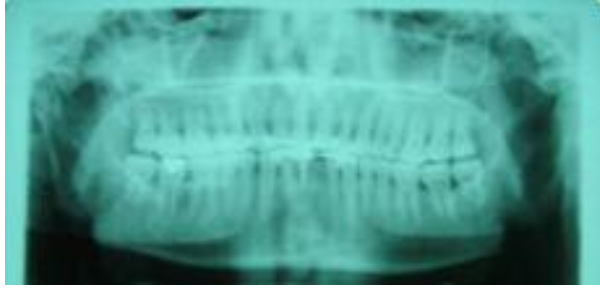


Figure 5b: The reimplanted teeth to panoramic radiograph



Figure 6: Anterior view of the reimplanted incisors after 2 months.

DISCUSSION

The success of avulsed tooth is directly proportional to the time and storage type of the tooth. Clinical studies have shown that teeth replaced within 20-30 minutes have the best prognosis, so reattachment success will be much higher.^{1,7} The choice of storage for preserving traumatically avulsed teeth is important for the success of future replantation.^{3,11} Ideally, the tooth should be stored in Hanks Balanced Salt Solution(HBSS), milk, storage medium, saliva, physiological saline and clean water to keep it clean.^{1, 5,6,11}

In our case, teeth were reimplanted into their original socket, and then were splinted with a 0.018 × 0.025 inch semi rigid arch wire and, bonded composite for the following 4 weeks. During this period, the patient was recommended to avoid biting on the splinted teeth and continue to brush his other teeth, and keep the mouth and all of other teeth as healthy as possible. Additionally, systemic penicillin was prescribed, only soft foods should be eaten and quitting acidic beverage consumption.

In conclusion, our study suggest that replantation of an avulsed tooth as soon as possible and using appropriate splint for such a case, and

follow up after treatment by a dentist will show good prognosis.

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