

The Hidden Tooth: A Case Report

S. MANIKANDAN, MD. NAZISH ALAM

ABSTRACT

We have described a case in which a fragment of a fractured incisor was embedded in the upper lip. This case report emphasizes the need for a thorough clinical and a radiographic

examination in all cases of soft tissue injuries which accompany a dental trauma. An early diagnosis and the surgical removal of these fragments could prevent undesirable foreign body reactions and scarring.

Key Words: Soft tissue trauma, Artery forceps

INTRODUCTION

Soft tissue injuries often occur in children during their play or during a quarrel among their peer group. The coexistence of avulsed teeth or coronal fractures should alert the clinician to their possible loss in deeply lacerated wounds. Tooth fragments may be embedded in any soft tissue. The lips are most often involved. Hence, a proper clinical and a radiographic examination of both the hard tissue and the soft tissue and taking the history of the trauma can help in the diagnosis as well as in the planning of the treatment.

CASE REPORT

The patient was a healthy, 14 year old boy who reported to the dental department with the chief complaint of broken upper front tooth and he sought help in its restoration. The patient revealed a history of trauma 5 years back, where he had fractured the right maxillary central incisor (#11). A laceration was present over the upper lip, with a profuse bleeding, during the time of the trauma, following which he had taken a first aid treatment in the casualty ward of a nearby hospital. The injury was examined and cleaned and suturing was done over the upper lip, at the site of the injury. The patient did not complain of any related problems except for the swelling which was present since the time of the injury.

On clinical examination following the history taking, it was found that the patient had a scar along the previously sutured region, with minor asymmetry of the upper lip [Table/Fig-1]. The intra-oral examination revealed a coronal fracture of the right maxillary central incisor (#11) which involved the enamel and the dentin. It was considered as an Ellis class III fracture, as there was discolouration of #11 [Table/Fig-2].

On palpation over the scar formation region, a hard swelling which was deeply seated, was felt. A radiograph of the upper lip was taken and it revealed the presence of a radiopaque mass [Table/Fig-3].

Following the examination, the treatment planning was done, which included removal of the hard mass and root canal treatment, followed by the restoration of the tooth with a ceramic crown.

Initially, the upper lip was anaesthetized and the hard mass was pressed against its mucosal surface. An incision was placed

along the area of prominence and it was carefully dissected, while simultaneously applying pressure from the labial surface of the lip [Table/Fig-4]. This manoeuvre squeezed out a white hard mass which was carefully grasped and removed with the help of an artery forceps [Table/Fig-5]. The removed mass was the fractured crown which had been entrapped in the upper lip at the time of the injury [Table/Fig-6]. The area was thoroughly examined and by using a 5-0 suture, it was approximated. Post-operative medications and instructions were given and the patient was subsequently examined and followed up.



[Table/Fig-1]: Swelling on the Upper Lip (Facial Profile)



[Table/Fig-2]: Intra-oral Examination



[Table/Fig-3]: Soft Tissue Radiograph



[Table/Fig-4]: Incision Made over the Swelling



[Table/Fig-5]: Fractured Tooth Retrieved from Upper Lip



[Table/Fig-6]: Fractured Tooth

DISCUSSION

The dental related trauma in the paediatric population can be physically and emotionally stressful for the children and their families [1]. Occasionally, a part of the fractured tooth may enter and be retained in the lip. When a patient has a swollen lip which is associated with trauma to the anterior dentition, one should always suspect embedded tooth fragments. A radiograph of the involved lip which was taken from a profile view, should be obtained to evaluate the possibility of penetration and retention of a piece of a fractured tooth [2]. A soft tissue radiograph can well be an occlusal view or a radiograph film which was placed between the lips and the dental arch, with a low exposure. Falls are the most common aetiology of these traumas in males, in the first decade of life [3-5]. Many factors contribute to the increased incidence of these injuries in permanent dentitions like an increased overjet (>6 mm), lip incompetence, and proclined upper anteriors [3,6,7]. Several similar cases have been reported, with the comprehensive management for the same [8-11].

CONCLUSION

This case report emphasizes the need for a thorough clinical and a radiographic examination in all cases of soft tissue injuries which accompany a dental trauma. An early diagnosis and the surgical removal of these fragments could prevent undesirable foreign body reactions and scarring.

REFERENCES

- [1] Clark JC, Jones JE. Tooth fragments embedded in the soft tissue: a diagnostic consideration. *Quintessence International* 1987; 18: 653-54.
- [2] Allen FJ. Incisor fragments in the lips. *Dental Practitioner* 1961; 11: 390-91.
- [3] Kaban LB. The diagnosis and the treatment of fractures of the facial bones in children, 1943-1993. *J Oral Maxillofac Surg* 1993;51:722.
- [4] Dewhurst SN, Manson C, Roberts GJ. The emergency treatment of orodental injuries: A review. *Br J Oral Maxillofac Surg* 1998;36: 165-75.
- [5] Luz JG, Di Mase F. The incidence of dentoalveolar injuries in hospital emergency room patients. *Endod Dent Traumatol* 1994;10:188-90.
- [6] O'Neil DW, Clark MV, Lowe JW, Harrington MS. Oral trauma in children: A hospital survey. *Oral Surg Oral Med Oral Pathol* 1989;68:691-6.
- [7] Dearing SG. Overbites, overjets, lip-drapes and incisor tooth fractures in children. *N Z Dent J* 1984;80:50-52.
- [8] Schwengber GFD, Cardoso M, Vieira RD. The bonding of a fractured permanent central incisor crown following the radiographic localization of the tooth fragment in the lower lip: a case report. *Dental Traumatology* 2010; 26(5): 434-37.
- [9] Thejokrishna.P, Prabhakar AR, Kurthukoti AJ. The reattachment of an embedded tooth fragment: A case report. *Annals and Essences of Dentistry* 2010; II (3).
- [10] Muthukumar RS, Alagappan M, Parthiban SV, Reddy V. A tooth fragment embedded in the upper lip after a traumatic dental injury: A case report. *Stream Dent* 2011; 2(3): 269-71.
- [11] Sangwan S, Mathur S, Dutta S. The retrieval and the reattachment of an elusive tooth fragment. *J Indian Soc Pedod Prev Dent.* 2011; 29(2):171-75.

AUTHOR(S):

1. Dr. S. Manikandan
2. Dr. MD. Nazish Alam

PARTICULARS OF CONTRIBUTORS:

1. Assistant Professor
Department of Dentistry, Sree Balaji Medical College,
Chennai, Tamil Nadu, India.
2. Dept of Periodontology, Sree Balaji Dental College,
Chennai, Tamil Nadu, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. MD. Nazish Alam
Sree Balaji Dental College, Narayanapuram,
Chennai, India.
Phone: +91-9884325366
E-mail: dr.naz.ish.alam@gmail.com

FINANCIAL OR OTHER COMPETING INTERESTS:

None.

Date of Submission: **Jan 21, 2012**
Date of Peer Review: **Apr 04, 2012**
Date of Acceptance: **Aug 20, 2012**
Date of Publishing: **Sep 30, 2012**