

Short Communication

Dental Emergency Treatment of a Trauma Patient: A Case Report

Gupta I, Bhartia R and Choubey S*

Department of Conservative and Endodontics, Rishiraj College of Dental Sciences and Research Centre, India

Abstract

In most cases trauma patients are treated in emergency wards of hospitals where dental emergency or trauma is often neglected. If the dental trauma is treated on time, the patients overall health can be encouraged.

Keywords: Dental trauma; Traumatic dental injury; Dental trauma management; Avulsion; Luxation; Subluxation; Oral laceration and splinting

Introduction

These are some common dental emergency occurring at the time of trauma or an accident

- Ellis class 1 (Includes crown fractures that extend only through the enamel, teeth are usually nontender, and without visible color change, but have rough edges) [1].
- Ellis class 2 (Fractures that involve the enamel and dentin layers, teeth are typically sensitive to cold, hot, touch and/or air exposure. A yellow layer of dentin may be visible on examination) [1]. Restoration on time can minimize the chances of further fracture.
- Ellis class 3 (Involve the enamel, dentin, and pulp layers. Teeth are extremely sensitive, and have a visible area of pink, red, or even blood at the centre of the tooth) [1]. If the patient with pulpal exposure can be treated within 24 hours to 48 hours after injury (direct pulp capping, pulpotomy) pulp vitality can be saved, in a very painful condition RCT can relieve the pain and further damage.
- Subluxation (An injury to the tooth-supporting structures with abnormal loosening, but without displacement of the tooth) [1], luxation (Partial displacement of the tooth out of its socket) [1] injuries-Splinting is mandatory
- Avulsion injury (Complete displacement of the tooth out of its socket) [1]. Teeth can be saved by reimplantation
- Oral and maxillofacial fractures/Oral lacerations/wounds if treated on time by oral and maxillofacial doctors can reduce the chances of further destruction and disfigurement. In our

modern competitive society, a pleasing appearance often means the difference between success and failure in both our personal and professional lives [2]. In today's world men and women are very conscious about their appearance. A beautiful smile can impact the level of self esteem and confidence and in which teeth play a vital role. Teeth are most primary things which are been noticed in facial aesthetics [3-6].

Case Presentation

A patient aged 21 years fell 15 days back in an accident where he fractured his upper front tooth region, he was treated at a trauma centre but no dental treatment was given. He came to the Department Of Conservative Dentistry and Endodontics at Rishiraj College of Dental Sciences and Research Centre, Bhopal (MP).

Examination

We found lacerations were present on left side of upper lip region, chin and near the left eye, Intraorally, there was Ellis class 2 fracture present on 11, 12 tooth region (Right Maxillary central and lateral incisor) [1], Ellis class 1 fracture with 21(Left Maxillary central incisor) [1] tooth region (Figure 1).

Vitality test was performed, radiographs and other investigations showed Positive result, that is teeth are vital [7-10]. In 21 composite build up was done (Figure 2).

In 11,12 vital pulp therapy was performed , but with questionable prognosis, had the patient being referred to dental surgeons in time or they being called to attend the emergency results could have been more predictable [11-15] (Figures 2 and 3).

Conclusion

The second most common cause of tooth loss is orofacial trauma; it has a significant negative effect on a patient's appearance, mastication and speech. A majority of these fractures involves the maxillary central incisors, with boys outnumbering girls almost two to one [16].

Dental trauma of the incisors and their supporting tissues, which is one of the most challenging dental emergencies, requires immediate assessment and management due to psychological and physical reasons. Treatment for trauma in young permanent teeth is crucial because of its continuing development to minimize undesired complications. The treatment of dental trauma is sometimes neglected, although it might lead to pain, difficulty in articulation

Citation: Gupta I, Bhartia R, Choubey S. Dental Emergency Treatment of a Trauma Patient: A Case Report. Ortho. 2022;2(1):1011.

Copyright: © 2022 Gupta I

Publisher Name: Medtext Publications LLC

Manuscript compiled: Oct 03rd, 2022

***Corresponding author:** Shrikant Choubey, Department of Conservative and Endodontics, Rishiraj College of Dental Sciences and Research Centre, Bhopal, Madhya Pradesh, India, E-mail: shrikantchoubey22@gmail.com

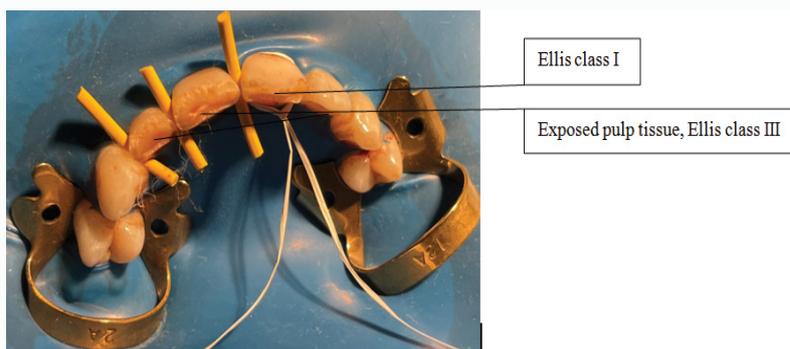


Figure 1: Pre-operative picture under rubber dam.

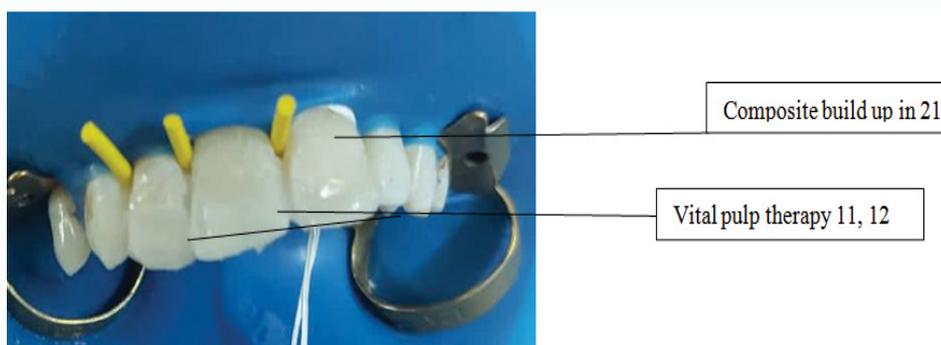


Figure 2: Composite build up.



Figure 3: Post operative.

and mastication as well as having considerable negative effects on the patient's self-esteem.

Wise use of skills, knowledge of the materials and methods should be done. Dental emergency should be the prime concern and should not be neglected. If the dental trauma is treated on time, the patients overall health can be encouraged [15,16]. Inadequate knowledge on dental trauma by medical doctors should provide the catalyst to establish an education plan to introduce dental traumatology. This will help to prevent any undesired outcomes on the victims of dental trauma [17].

References

- Pagadala S, Tadikonda DC. An overview of classification of dental trauma. IAIM. 2015;2(9):157-64.
- Manipal S, Mohan CSA, Kumar DL, Cholan PK, Ahmed A, Adusumilli P. The importance of dental aesthetics among dental students assessment of knowledge. J Int Soc Prev Community Dent. 2014;4(1):48-51.
- Akarslan ZZ, Sadik B, Erten H, Karabulut E. Dental esthetic satisfaction, received and desired dental treatments for improvement of esthetics. Indian J Dent Res. 2009;20(2):195-200.
- Goldstein RE. Study of need for esthetics in dentistry. J Prosthet Dent. 1969;21(6):589-98.
- Odioso LL, Gibb RD, Gerlach RW. Impact of demographic, behavioral, and dental care utilization parameters on tooth color and personal satisfaction. Compend Contin Educ Dent Suppl. 2000;29:S35-41;quiz S43.
- Rosenoer LM, Sheiham A. Dental impacts on daily life and satisfaction with teeth in relation to dental status in adults. J Oral Rehabil. 1995;22(7):469-80.
- Chen E, Abbott PV. Dental Pulp Testing: A Review. Int J Dent. 2009;2009:365785.
- Bender IB. Reversible and irreversible painful pulpitis: diagnosis and treatment. Aust Endod J. 2000;26(1):10-4.
- Hanna SN, Alfayate RP, Prichard J. Vital Pulp Therapy an Insight over the Available Literature and Future Expectations. Eur Endod J. 2020;5(1):46-53.
- Ghoddusi J, Forghani M, Parisay I. New approaches in vital pulp therapy in permanent teeth. Iran Endod J. 2014;9(1):15-22.
- Zhang W, Yelick PC. Vital pulp therapy-current progress of dental pulp regeneration and revascularization. Int J Dent. 2010;2010:856087.
- American Association of Endodontists. Guide to Clinical Endodontics. 4th ed. 2019.
- European Society of Endodontology. Quality guidelines for endodontic treatment: consensus report of the European Society of Endodontology. Int Endod J. 2006;39(12):921-30.
- Soneta S, Kajjari S, Hugar SM, Uppin C, Meharwade P, Malavalli P. Aesthetic Rehabilitation of Ellis Class II Fracture Using the Template Technique: A Case Report. Int J Cur Res Rev. 2021;13(15):158-60.

15. Andreasen JO, Ravn JJ. Epidemiology of traumatic dental injuries to primary and permanent teeth in a Danish population sample. *Int J Oral Surg.* 1972;1(5):235-9.
16. Martens LC, Beyls HM, de Craene LG, D'Hauwers RF. Reattachment of the original fragment after vertical crown fracture of a permanent central incisor. *J Pedod.* 1988;13(1):53-62.
17. Yeng T, O'Sullivan AJ, Shulruf B. Appropriate management of traumatic dental injuries at the hospital emergency department provides a positive impact on patient outcomes: exemplar case study. *AMJ.* 2019;12(9):255-62.