

The Dental Trauma in General Hospital

Kyung- Gyun Hwang¹⁾ and Hyuk Chung²⁾

¹⁾ Department of Dentistry, Oral & Maxillofacial Surgery, College of Medicine, Hanyang University, Seoul Korea

²⁾ Department of Dentistry, Oral & Maxillofacial Surgery, Seoul National University Borame Hospital, Seoul, Korea

Abstract: Sports, accidental falls, motor vehicle accidents, assault and work related accidents account for the majority of dentofacial injuries. This study included data of 551 dentofacial traumas patients were treated. Treatment of dentofacial trauma must be considered a return of normal ocular, mastication, restoration of speech, and an acceptable facial and dental esthetic result.

Keywords: trauma, dentofacial injury

Introduction.

The moderns are exposed to several risks such as trauma and accidents. Sports, accidental falls, motor vehicle accidents, assault and work related accidents account for the majority of dentofacial traumas and, especially, dentofacial traumas cause serious complication and dentofacial deformities. Dentofacial trauma is injury to mouth, including teeth, lips, gums, tongue, and jawbones. The most common dental trauma is a broken or lost tooth. Since oral tissues are highly sensitive, injuries to the mouth are typically very painful. Mandible fractures are lower jaw fractures. The specific anatomic location of the fracture is dependent on the mechanism of injury and direction of the traumatic blow. Patients commonly present with fractures of the symphysis, sub-condyle and angle area. Goals in the treatment of dentofacial traumas include rapid bone healing, a return of normal ocular, masticatory, and nasal function, restoration of speech, and an acceptable facial and dental esthetic result. This paper describes the types, etiology, and treatment of dentofacial traumas that have been experienced at the department of dentistry in General Hospital.

Material and Methods

This study included data of 551 dentofacial traumas patients were treated by Department of Oral and Maxillofacial Surgery at the Hanyang University Hospital from January 1, 2003 to October 31, 2005. The patients' documents and radiographs, as well as their case histories, etiological features and injury patterns were analyzed. The causes of the injuries were classified as follows: traffic accidents, activities associated with daily-life (ADL, including falls, stumbling, collision, playing accidents), assaults, sports, and work related accidents.

Result and Discussion

Among the 551 patients, there were 376 males (68.2%) and 175 females (31.7%), and the overall male to female ratio was 2.15:1. The patients' ages ranged from 7 months to 80 years. The mean age of the patients was 32.3 years (median 30). Tooth avulsions (48.9%) were the most common pattern of the injury, which

was followed by tooth fractures (31.7%) and soft tissue injuries (19.2%). The patients' ages ranged from 6 months to 81 years. The mean age of the patients was 25.5 years (median 22). A total of 419 patients (75.4 %) were aged between 0 and 39 years. The subgroup of those age 20-29 years (25.4%) had the highest percentage of subjects, followed by the subgroup aged 30-39 years (20.1%). The most common cause of the injury was activities associated with daily-life (ADL) i.e. falls, stumbling, collisions, play-accidents (43.6%), and followed by assault (24.3%) and sports (17.0%).

One of the most important aspects of correction of dental trauma is the restoration of the pre-injury occlusal relationship and oral function. Therefore, a primary goal in the treatment of dental trauma is the restoration of the occlusion, esthetic oral structures. Dentofacial traumas in children are also a significant cause of complication, and its prevention, especially in home and streets, needs urgent attention. So, many specialists, such as oral surgeon, endodontist, pedodontist, oral radiologist, pathologist, must involve and communicate in the treatment of dentofacial trauma.

References

1. Van Beek GJ, Merckx CA. *Int J Oral Maxillofac Surg* 28:424-428;1999
2. Castaldi CR. *Pediatr Dent* 8:311-316;1986
3. Gassner R, Bosch R, Tuli T, Emshoff R. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 87:27-33;1999

Correspondence to Kyung-Gyun Hwang, DDS,MSD, PhD. Assistant Professor, Department of Dentistry, Oral & Maxillofacial Surgery, College of Medicine, Hanyang University, # 17 Haengdang-Dong, Seongdong-Ku, Seoul 133-792, Korea TEL: + 82-2-2290-8676 FAX : + 82-2-2290-8673, E-mail : hkg@hanyang.ac.kr