Dentoalveolar trauma: Can you manage it?

Prior to age 21, about 3 of 4 of our patients in a typical family practice suffer some sort of traumatic episode involving the anterior dentition, and about 1 in 4 suffer fractured teeth as a result.¹ Our understanding of evidence-based best practices in managing these injuries has improved greatly. Dental materials science has yielded better products, and a worldwide improvement in oral health has resulted in increased demands for maintaining the oral cavity in good form, function, health, and esthetics for a lifetime.

Given this environment, the expectation that dentists successfully save teeth and restore function and esthetics after traumatic injury is understandable. General dentists should be able to provide these services in a predictable manner, either in their own office or with assistance from a trauma-oriented specialist.

We have recently published several articles that deal with trauma, and in this issue we present three more. Diab and ElBadrawy (page 377) present the third part of their series on intrusion injuries of primary incisors; Ramires-Romito et al (page 405) discuss the biologic restoration of primary anterior teeth; and Chu et al (page 385) suggest clinical considerations for reattaching fractured tooth fragments.

The point in continuously publishing papers on this topic is not redundancy but need. In a world in which 75% of our young patients suffer oral trauma, we must be knowledgeable and competent in managing such events. Understanding what to do and why is fundamental to success.

The initial assessment of the injury is critical and must be performed thoroughly with careful attention to detail. A full and current understanding of healing processes is necessary, as is knowing when not to treat. Sometimes the normal healing process is adequate, and anything else constitutes overtreatment. Other times various interventions are clearly indicated. Making this determination and following up on it is the central theme of a new text by Mitsuhiro Tsukiboshi, *Treatment Planning for Traumatized Teeth.*²

Treating the initial injury(ies) requires equally important critical thinking and clinical decision-making skills. Tsukiboshi presents these elements completely. Emphasis is placed on avoiding unnecessary treatment, particularly in younger patients. The assessment, management, and treatment of acute trauma to the head, face, and oral cavity is fundamental to comprehensive attending dentistry and must include accurate evaluation of tooth injury, soft tissue damage, and alveolar/facial bone fracture.

Editorial

The final aspect necessary to treat these injuries is the long-term follow-up and treatment of the injury sequelae. The Diab/ElBadrawy series deals with this aspect, particularly in more severe trauma. Multiple disciplines usually must be consulted during recovery from the acute phase of trauma.¹⁴ Skills based in occlusion, complex oral rehabilitation, and maxillofacial prosthodontics inevitably are required to treat the more severe trauma or postoperative surgical cases resulting from automobile accidents, social altercations, gunshot wounds, orofacial malformation, and cancer surgery.

For those of us who enjoy dentistry beyond the average scope of practice, the management and treatment of complex cases adds the challenge and reward of reaching beyond the ordinary. Although the educational and competency demands are more rigorous, it is an area worth exploring.

Bill Ulathan OMD

William F. Wathen, DMD Editor-in-Chief

Suggested reading

- Andreasen JO, Andreasen FM. Textbook and Colour Atlas of Traumatic Injuries to the Teeth, ed 3. Copenhagen: Munksgaard, 1994.
- Tsukiboshi M. Treatment Planning for Traumatized Teeth. Chicago: Quintessence, 2000.
- Brånemark P-I, Tolman DE (eds). Osseointegration in Craniofacial Reconstruction. Chicago: Quintessence, 1998.
- Brånemark P-I, Oliveira MF (eds). Craniofacial Prostheses: Anaplastology and Osseointegration. Chicago: Quintessence, 1997.