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Guest Editorial

Management of mandibular fractures in maxillofacial trauma – A brief overview

Ashish Kamboj [1,*]

[1] *Dept. of Orthodontics, Government Dental Centre, Leh (UT of Ladakh), India*

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More often than any other facial skeleton fracture, mandibular fractures have the highest frequency. Road traffic accidents, interpersonal aggression, falls, work-related injuries, and sports-related injuries are the main causes of mandible fractures. [1]

Functional difficulties, social morbidities, and cosmetic morbidities are all brought on by mandibular fractures. For the majority of mandibular fractures, the authorities today recommend open reduction and internal fixation (ORIF). Over the past few decades, mandibular fracture treatment methods have advanced significantly. These methods include wire osteosynthesis, open reduction with rigid internal fixation, or open reduction with either adaptive miniplate fixation or maxillomandibular fixation (MMF). [2]

In recent years, novel procedures have been introduced and examples include locking/nonlocking reconstruction bone plates, multiple lag screws, single strong nonreconstruction bone plates, multiple bone plates, miniplates, microminiplates and bioresorbable plates at fracture sites. [3]

Mustafa Farmand was the first to develop the three-dimensional (3D) titanium plating technique for the treatment of mandibular fractures. Conceptually, their shape permits stability in three dimensions through a greater number of screws and force resistance while preserving a low profile and malleability. [4]

Three-dimensional miniplates and osteosynthesis have revolutionized the way that mandibular fractures are treated. Benefits include straightforward intraoral application, little bone exposure, ease of plate adaptation to the surface of the bone, reduced implant material, and efficacy to support the masticatory load during osteosynthesis of fracture. [4]

The ultimate goal of treatment is to return the patient's maxillomandibular orientation and dental occlusion to their pre-injury states. Over the past few decades, mandibular fracture treatment has undergone a steady change. The most notable improvements in the treatment of mandibular fractures are based on specific technical refinements in the methods of internal fixation.

Conflict of Interest

None.

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* *Corresponding author*.
E-mail address: aashishkamboj@ymail.com (A. Kamboj).

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Author biography

Ashish Kamboj, Orthodontist
https://orcid.org/0000-0002-1836-6786