

Aetiology, Prevalence, Fracture Site and Management of Maxillofacial Trauma: A Retrospective Study

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ABSTRACT

Maxillofacial fractures are frequently associated with severe morbidity, functional impairment, facial disfigurement, and substantial economic burden. This study aims to evaluate the etiology, fracture patterns, and treatment modalities of maxillofacial trauma cases managed at the Department of Oral and Maxillofacial Surgery, King Fahad Hospital, Al-Baha Province, Saudi Arabia. By retrospectively analyzing clinical records, the study seeks to contribute to the growing body of evidence that informs preventive strategies, facilitates early diagnosis, and optimizes surgical management. This retrospective study analyzed the medical records of 238 patients who presented maxillofacial trauma to the Department of Oral and Maxillofacial Surgery at King Fahad Hospital, Al-Baha, between January 2020 and December 2024. Extracted data included demographic details (age and sex), etiology of trauma, anatomical site of fractures, and treatment approaches. The majority of patients were males under the age of 20 years. Road traffic accidents (RTAs) were the leading cause of injury, accounting for 56.3% of cases. Mandibular fractures were the most prevalent, representing 64.9% of all recorded fractures. Open reduction and internal fixation (ORIF) were the primary treatment modalities, utilized in 55.5% of cases. RTAs emerged as the predominant cause of maxillofacial trauma in this cohort, particularly affecting young male patients. Mandibular fractures were the most common type observed. More than half of all maxillofacial fractures were managed using ORIF. The high incidence may be attributed to poor adherence to traffic laws, particularly among inexperienced drivers, and specific sociocultural driving behaviors.

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