



"ANALYSIS OF FACIAL FRACTURES" - A RETROSPECTIVE STUDY
by

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Aims:

The aim of the study is to retrospectively analyse the incidence of facial fractures along with age, gender predilection, etiology, commonest site, associated dental injuries and any complications of patients operated in Craniofacial unit of SDM college of dental sciences and hospital.

Materials & Methods:

This retrospective study was conducted at the department of OMFS, SDM College of Dental Sciences, Dharwad from January 2003 - December 2013.

Method:

1. Age and gender predilection were analysed and incidence was calculated
2. Cause of injury was analysed under following classifications: Traffic accidents, Assaults, Falls, Sports related accidents, Industrial accidents.
3. Patients with mandibular fractures were analysed and the commonest patterns were identified. They were classified as: Symphysis, Parasymphysis, Body, Angle, Ramus, Condylar process and Coronoid process.
4. Patients with midface fractures were analysed and also the commonest pattern was identified. They were classified into: Isolated nasal bone fractures, Le Fort I, II & III, Isolated zygomatic arch fracture, Zygomatico maxillary complex fracture, NOE fracture, Palatal fracture, Frontal bone fracture and Temporal bone fracture.
5. Different types of dental injuries associated with facial fractures were analysed.
6. All the complications associated with these fractures were also analysed.
7. Treatment modalities and the rate of morbidity and mortality were also noted.

8. Data were analyzed using statistical analysis that is Chi-square test.

Results:

A total of 1146 patients reported at our unit with facial fractures during these 10 years. Males were more commonly affected than females and commonest age subgroup was 25-34 years. Mandible was the commonest bone to be fractured among all the facial bones. Parasymphysis was the most common region of fracture in mandible and in midface zygomaticomaxillary complex bone was most commonly fractured. Associated soft tissue injuries were seen in 50% of these cases and the commonest injury was laceration. Maxillary central incisors were the most common teeth to be injured and avulsion was the most common type of injury. All these fractures were treated by open reduction internal fixation or by closed reduction depending on the pattern of fracture. Commonest post-operative complication was plate infection leading to plate removal. Other injuries associated with facial fractures were rib fractures, head injuries, upper and lower limb fractures etc.

Conclusion:

Facial injuries can affect physical wellbeing and psychological aspects of patient as well as affect the economic status of society. This study was done not only to analyse the different types of facial fractures and the pattern of fracture of cases admitted in our craniofacial unit but also as contributinal data which will help us to take preventive measures to avoid such injuries and make the appropriate treatment plan and execute it to achieve the pre-injury status of form and function.

Keywords: Facial Fractures; Epidemiology; Associated Injuries; Dental Injuries