

ANALYSIS OF FRACTURES OF THE FACIAL BONE

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Abstract

The medical records of these patients were reviewed and analysed to determine the clinical characteristics and treatment of facial bone fractures. This is a retrospective study of 2,094 patients with facial bone fractures from various accidents that were treated at the Inha University Hospital from 2011 to 2023.

Keywords: Facial bones, facial fractures, injury prevention, treatment.

Facial injuries occur in a significant proportion of trauma patients requiring prompt diagnosis of fractures and soft tissue injuries, with possible emergency interventions.[1] Each year, increasing numbers of patients are admitted to the hospital with facial trauma.[1] There are many studies in the literature that have analysed the demographic factors associated with facial trauma according to various criteria.[2-4] The epidemiology of facial fractures varies with regard to injury type, severity and cause, depending on the population studied.[5] The differences in the populations with regard to the causes of facial fractures may be the result of differences in culture and a variety of risk factors. However, the reports on patients studied, use the severity of the injury as the major selection criteria for epidemiological investigation.[5]

An understanding of the cause, severity and temporal distribution of facial trauma can aid in establishing clinical and research priorities for effective treatment and prevention of these injuries.[5] Continuous long-term collection of data regarding the epidemiology of facial fractures is important because it provides information necessary for the development and evaluation of preventive measures that might help reduce the incidence of facial injuries.[5]

The purpose of this study was to report on the natural history of facial injuries in 2,094 cases over 11 years at the Department of Plastic and Reconstructive Surgery, Bukhara University Hospital, Uzbekistan.

The medical records of patients seeking treatment for facial trauma were reviewed at the Department of Plastic and Reconstructive Surgery, Bukhara University Hospital, Uzbekistan. The study population consisted of 2,094 severely injured patients with facial fractures from February 2011 to April 2023, who were admitted to our hospital for operation and conservative treatment. The parameters assessed were age, gender, time of injury, aetiology and associated injuries, in addition to the type of fracture and treatment offered. The facial bone fractures were classified as isolated or complex fractures. The isolated facial bone fractures included frontal bone, orbital bone, nasal bone, maxilla, zygoma and mandible. The complex fractures were subclassified into five types according to the anatomical direction from the orbit and the extension from an adjacent area, which were superior, medial, lateral, inferior or other locations. In addition, the complications and prognoses were analysed

The most common age group was the third decade of life (29%). Males were more common than females (3.98:1). The most common aetiology was violent assault or nonviolent traumatic injury (49.4%). The most common isolated fracture site was the nasal bone (37.7%), followed by the mandible (30%), orbital bones (7.6%), zygoma (5.7%), maxilla (1.3%) and the frontal bone (0.3%). The largest group with complex fractures included the inferior region of the orbital floor and zygomaticomaxilla

(14%). Closed reduction was performed in 46.3% of the cases while 39.7% of the cases required open reduction. For open reductions, the most commonly used soft-tissue approach was the intraoral approach (32.3%). The complication rate was 6.4% and the most common complication was hypoesthesia (68.4%) followed by diplopia (25.6%).

Long-term collection of epidemiological data regarding facial fractures and concomitant injuries is important for the evaluation of existing preventive measures and useful in the development of new methods of injury prevention and treatment.

References:

1. Erol B, Tanrikulu R, Görgün B. Maxillofacial fractures: Analysis of demographic distribution and treatment in 2901 patients (25-year experience) J Craniomaxillofac Surg. 2004;32:308–13. [PubMed] [Google Scholar]
2. Bataineh AB. Etiology and incidence of maxillofacial fractures in the north of Jordan. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 1998;86:31–5. [PubMed] [Google Scholar]
3. Iida S, Matsuya T. Paediatric maxillofacial fractures: Their aetiological characters and fracture patterns. J Craniomaxillofac Surg. 2002;30:237–41. [PubMed] [Google Scholar]
4. van Hoof RF, Merckx CA, Stekelenburg EC. The different patterns of fractures of the facial skeleton in four European countries. Int J Oral Surg. 1977;6:3–11. [PubMed] [Google Scholar]
5. Олимова Д.В. СИНДРОМ ЖЖЕНИЯ ВО РТУ: ОБЗОР ЕГО ДИАГНОСТИЧЕСКОГО И ТЕРАПЕВТИЧЕСКОГО ПОДХОДА. // THE BEST INNOVATOR IN SCIENCE – 2022. – С. 37-43
6. Olimova D.V. DIFFERENTIAL DIAGNOSTIC METHODS GALVANOSA AND GLOSSODINIA IN AMBULATORY CONDITIONS. // GALAXY INTERNATIONAL INTERDISCIPLINARY RESEARCH JOURNAL (GIIRJ) ISSN (E): 2347-6915 Vol. 10, Issue 1, Jan. (2022). – P. 524-526
7. Olimova D.V. A COMPLEX APPROACH TO GLOSSALGIA TREATMENT BASED ON THE CURRENT DATA ON THE SPECIFICITY OF ITS ETIOPATHOGENESIS. // “BILIG – ILMİY FAOLIYAT” nashri <http://bilig.academiascience.or> - B. 141-146
8. Шукуруллаева Г.Ж., Рахимов З.К.. СОВЕРШЕНСТВОВАНИЕ МЕТОДОВ ЛЕЧЕНИЯ СОЧЕТАННЫХ ПЕРЕЛОМОВ СКУЛОВОЙ КОСТИ, СТЕНКИ ГЛАЗНИЦЫ И ВЕРХНЕЙ ЧЕЛЮСТИ// НОВЫЙ ДЕНЬ В МЕДИЦИНЕ 2020, С. - 350-352.
9. Шукуруллаева Г. Ж.. ЁНОҚ-КЎЗ ВА ЮҚОРИ ЖАҒ БЎШЛИҒИ ДЕВОРИ СИНИШЛАРИ БИЛАН ЖАРОҒАТЛАНГАН БЕМОРЛАРДА ТРАВМА ХАРАКТЕРИ ВА ЛОКАЛИЗАЦИЯСИ // Journal of Advanced Research and Stability Volume: 02 Issue // 2022, P.- 196-200.
10. Shukrullayeva G. J.. Analysis of Investigations in Trauma Patients with Cheek-Eye and Maxillary Wall Fractures // Research Journal of Trauma and Disability Studies // 2022, P. – 20-24.
11. Shukrullayeva G. J.. APPLICATION OF TITANIUM MINI-PLATES AND CATHETER FOLEYA IN OSTEOSYNTHESIS OF CHEEK-EYE AND MAXILLARY WALL // Web of Scientist: International Scientific Research Journal // 2022, P. – 661-663.
12. Shukrullayeva G. J.. EVALUATION OF EXAMINATIONS IN PATIENTS WITH CHEEK EYE AND OREONTRAL CLEFT FRACTURES // Horizon: Journal of Humanity and Artificial Intelligence // 2023, P. – 575-578.
13. Хайруллаева Дильнора Хислатовна. ДИАГНОСТИЧЕСКОЕ ЗНАЧЕНИЕ ПОЛИМОРФИЗМА ГЕНА В ТЕЧЕНИИ ВИРУСНОГО ГЕПАТИТА С// INTERNATIONAL BULLETIN OF APPLIED SCIENCE AND TECHNOLOGY, 3(4), <https://doi.org/10.5281/zenodo.7882474> // 2023, P - 969–972.

14. Yuldasheva D.H., Xayrullayeva D.X.. DIAGNOSTIC SIGNIFICANCE OF GENE POLYMORPHISM IN THE COURSE OF VIRAL HEPATITIS B AND C // INTERNATIONAL BULLETIN OF MEDICAL SCIENCES AND CLINICAL RESEARCH, 2(11), <https://doi.org/10.5281/zenodo> // 2022, P - 29–31.
15. K.D. Khislatovna, S.M. Avezova. Changes in hormonal in adverse environmental condition // World Journal of Pharmaceutical Research // 2020, P -
16. K.D. Khislatovna. DIAGNOSTIC SIGNIFICANCE OF GENE POLYMORPHISM IN THE COURSE OF VIRAL HEPATITIS B AND C//BARQARORLIK VA YETAKCHI TADQIQOTLAR// 2022, P. – 113-115.
17. D.H. Yuldasheva, D.X. Xayrullayeva. DIAGNOSTIC SIGNIFICANCE OF GENE POLYMORPHISM IN THE COURSE OF VIRAL HEPATITIS B AND C // Евразийский журнал медицинских и естественных том 2(8) // 2022, P.- 50-53.
18. K.D. Khislatovna. Condition of Discirculatory Encephalopathy in Hypothyroidism // EUROPEAN JOURNAL OF INNOVATION IN 2(5)// 2022, P.- 255-257.
19. K.D. Khislatovna. Indicator Of Discirculatory Encephalopathy In Hypothyroidism // International Journal of Human Computing Studies, 2(6)// 2020, P.- 34-37.