# BRHS: BREDICALJOURNAL

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# **British Medical Journal**

## Volume 3, No.2, March 2023

Internet address: http://ejournals.id/index.php/bmj E-mail: info@ejournals.id Published by British Medical Journal Issued Bimonthly 3 knoll drive. London. N14 5LU United Kingdom +44 7542 987055

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## ANALYSIS OF TYPES OF SURGICAL APPROACHES IN PATIENTS WITH ASSOCIATED INJURIES OF THE MAXILLOFACIAL REGION IN OUR PRACTICE

Shovkat Karshiyev

Center for the Development of Professional Qualifications of Medical Workers

Abstract: The anatomy of the maxillofacial area is very complex, and it may be necessary to make a cut in several places in order to make a surgical area look good. The combination of access techniques, in our opinion, depends on the specificity of the anatomical area and the stage of formation of the defect.

Keywords: maxillofacial injury, combined injuries of the maxillofacial region, cuts.

**Introduction:** In the last decade, there is an increase in the number of injuries, especially in severe cases. Based on the data of the World Health Organization, it was determined that 1.71 billion people suffer from diseases of the musculoskeletal system on earth. the person is suffering. One of the main problems of the maxillofacial area (FMJ) injuries is one of the main problems. These injuries remain a serious clinical problem due to the location of this anatomical region [1]. Although these injuries are common worldwide, their occurrence and pattern are of great concern because they are associated with several factors, including social, cultural, and environmental factors, and thus vary by population [1-4]. Road traffic accidents (TIAs) remain the leading cause of injury, followed by assaults, sports, occupational injuries and falls [2-6]. Yu z-jaw area lesions occur mainly in men between the ages of 21 and 30, with a male-to-female ratio of 2:1 to 11:1 [2, 5-7]. It is often associated with significant morbidity, deformity, loss of function, and high cost of treatment [3].

Yu z-jaw Patients with area injuries may present with specific injury sites. Yu z-jaw Sphere joint injuries are often associated with a high rate of secondary head and neck injury after trauma, but are often overlooked in the initial evaluation. Vles and others. found that 14.3% of late-diagnosed trauma patients had facial fractures. [8] In addition, many authors suggest that facial trauma is secondary to facial trauma . found that it may be associated with spinal cord injuries and secondary injuries, including lung, spinal cord, eye, and head injuries. [9,10].

To cultural, environmental and socio-economic factors, area injuries the reasons vary throughout the world [11]. Therefore, epidemiological studies are used to analyze etiology, incidence and severity [12]. Among European countries, Portugal has the highest injury and death rate. According to the 2010 Portuguese Statistical Yearbook (from the National Institute of Statistics), a total of 35,426 traffic accidents were recorded, of which 424 were fatal [13]. Several literature reviews of industrialized countries have cited cold weapon attacks as another major cause [14].

To reduce morbidity and mortality, early detection of severe traumatic brain injury and associated injuries remains an important part of the initial evaluation and management plan for patients with severe injuries. Understanding the cause, severity, and prevalence of facial trauma and associated injuries can help optimize initial clinical management and determine the right time to involve an oral surgeon. In this context, it has recently been increasingly accepted that patients with persistent multiple injuries benefit from early multispecialty treatment in a specialized trauma center [16]. Despite the widespread implementation of modern methods of diagnosis and treatment of injuries in the facemiddle area, as a result of the occurrence of post-traumatic defects and post-operative

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complications, aesthetic and cosmetic deficiencies, anatomical and functional disorders, the continuation of treatment in several stages affect not only the patient's nervous and mental state, but also leads to long-term permanent loss of activity.

Materials and methods: A total of 118 patients participated in our study. Among B emors, men (n = 100); 87%) and women (n = 18; 13%), the patients were distributed according to age as follows. Patients aged 18 to 66 years were included in the study. The majority of patients were divided into age groups of 18 to 30 years (n=54) and 31 to 40 (n=30) and 41-51 and 52-66 years.

In the surgical practice we used: through the upper eyelid, subciliary and intraoral, infraorbital, subtorsal access techniques.

Outcome: Upper lid access: This technique has been used in combination with intraoral subciliary techniques when three-point fixation of the bone is required in the maxillofacial region, mainly in checo-ocular complex fractures.

In order to clearly see the outer edge of the eye, the cheek-forehead seam, an incision was made over the eye socket, starting from the outer corner of the eyebrow.



Picture: 1 and 2

The proposed approach is esthetically superior to the traditional approach, is less noticeable, and allows effective approximation of the outer rim of the eyeball with cheekbone repositioning and titanium microplate fixation.

In our practice, 19 patients underwent upper eyelid surgery.

Subtorsal access technique: An incision is made parallel to the lash line, 3.5 mm below it, just below the tarsus.



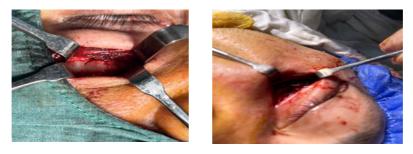
## Picture-3

The advantages and disadvantages of different surgical access methods were studied by Holtmann et al., who concluded that a subtorsal incision was preferable. It is easier to access the lower and medial walls of the eyeball, it takes time to create, and an

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invisible scar remains after the operation.

Access through the subciliary incision: The patient's head was placed in a horizontal position on the surgical table to facilitate the subciliary incision and examination of the lower part of the eyeball and, if necessary, the lower third of the medial and lateral walls. Then, with the help of brilliant blue, in the area of the lower eyelid, 2-3 mm below the border of the lower eyelashes, the place of the incision is marked. The distance from the eyelashes to the incision was determined individually depending on the structure of the patient's lower eyelid, taking into account the presence of wrinkles in the skin in this area, as well as the presence of scars after previous operations. A total of 3 patients were operated on through this section.



4,5 and 6- Fig

Intraoral access technique: this method is widely used in performing various operations in surgical dentistry and maxillofacial surgery. An incision along the transverse fold of the upper jaw was first proposed by Lothrop in 1906. Used for surgical treatment of acute, developing and post-traumatic defects in the maxillofacial region and allowed to see the maxillary tuberosity and buccal-alveolar edge in the area of the anterior surface of the upper jaw to the lower edge of the eye socket.

From the vestibular side, the incision was made from the lateral incisors to the second molars in unilateral defects, and from 17 to 27 in bilateral defects, 3 mm above the transitional fold. The upper lip was made by making acircular cut at an acute angle from the top. A total of 56 people entered through this section.



Fig. 7 and 8

operative scarring through the infraorbital access technique is not aesthetically satisfactory and sometimes causes long-term orbital swelling. through this approach, it is possible to perform an osteotomy of the cheek bone in the area of the buccal-alveolar ridge and restore this buttress with the help of bone grafts. A total of 21 patients underwent surgery through the infraorbital access technique through this access method. After that, detection of hematomas in the upper and lower eyelids, as well as complications such as narrowing of the eye slit, asymmetry of the pupil line, improved 2 times faster.

**Conclusion:** Thus, the subciliary incision meets the aesthetic requirements, provides sufficient visibility of the operative field, does not cause lymphostasis, but ectropion, lower eyelid contraction, and opening of the sclera may occur more often than other

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incisions. In the subtarsal section - creates a sufficient opening of the operative field, rarely leads to reduction of the lower eyelids, never causes ectropion, aesthetically lags behind the subciliary section, and more lymphostasis occurs. In the infraorbital section - provides a good view of the operative field, does not cause the lower eyelid to shrink, but causes long-term lymphostasis and does not meet the aesthetic requirements.

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