E- Global Congress
Hosted online from Dubai, U. A. E., E - Conference.
Date: 28th February 2025
Website: https://eglobalcongress.com/index.php/egc
ISSN (E): 2836-3612

OPTIMIZATION OF DIAGNOSIS, TREATMENT AND IMPROVEMENT OF THE QUALITY OF LIFE OF PATIENTS WITH COMBINED FACE-JAW TRAUMA

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Annotatsion

Combined face-jaw trauma (CFJT) is one of the most complex and severe categories of traumatic injuries, requiring a comprehensive interdisciplinary approach to diagnosis, treatment and rehabilitation of patients. This article discusses modern diagnostic methods and their role in the timely detection of injuries, as well as advanced treatment strategies, including surgical and conservative methods. Particular attention is paid to the issues of rehabilitation and improving the quality of life of patients, including psychological aspects and restoration of functions. An analysis of modern research in the field of traumatology and face-jaw surgery is provided, and promising areas for further development of diagnostics and therapy of CFJT are discussed.

Key words. combined face-jaw trauma, diagnostics, treatment, rehabilitation, quality of life, surgery, traumatology.

ОПТИМИЗАЦИЯ ДИАГНОСТИКИ, ЛЕЧЕНИЯ И УЛУЧШЕНИЯ КАЧЕСТВА ЖИЗНИ ПАЦИЕНТОВ С СОЧЕТАННОЙ ЧЕЛЮСТНО-ЛИЦЕВОЙ ТРАВМОЙ

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Аннотация:

Сочетанная челюстно-лицевая травма (СЧЛТ) является одной из наиболее сложных и тяжёлых категорий травматических повреждений, требующих комплексного междисциплинарного подхода к диагностике, лечению и реабилитации пациентов. В данной статье рассматриваются современные методы диагностики и их роль в

ISSN (E): 2836-3612

своевременном выявлении повреждений, а также передовые стратегии лечения, включающие хирургические и консервативные методы. Особое внимание уделено вопросам реабилитации и повышения качества жизни пациентов, включая психологические аспекты и восстановление функций. Приводится анализ современных исследований в области травматологии и челюстно-лицевой хирургии, а также обсуждаются перспективные направления дальнейшего развития диагностики и терапии СЧЛТ.

Ключевые слова: сочетанная челюстно-лицевая травма, диагностика, лечение, реабилитация, качество жизни, хирургия, травматология.

Introduction

The face-jaw region is one of the most vulnerable anatomical zones of the human body, which is due to its anatomical and functional features and location. Combined injuries to this region are often accompanied by damage to adjacent structures, including the brain, cervical spine, organs of vision and respiratory tract (Zaitsev et al., 2019).

The incidence of combined face-jaw trauma (CFJT) remains high due to the increasing number of road accidents, industrial and domestic injuries, as well as acts of violence (Ivanov and Petrov, 2021). According to the World Health Organization (WHO), maxillofacial injuries account for about 10-15% of all cases of traumatic injuries and require an integrated approach to treatment and rehabilitation (WHO, 2020).

The purpose of this article is to analyze modern methods of diagnosis, treatment and rehabilitation of patients with CFJT, as well as to discuss the key issues affecting their quality of life.

Main part

1. Diagnosis of combined maxillofacial trauma

Early and accurate diagnosis of combined maxillofacial trauma plays a decisive role in choosing treatment tactics and preventing possible complications. Modern diagnostic methods include:

Clinical examination. Includes assessment of vital functions, visual examination, palpation, and anamnesis (Kozlov et al., 2020).

X-ray. Used to detect fractures of the facial bones, especially if damage to the lower jaw is suspected (Morozov, 2022). Computed tomography (CT). Provides highly accurate visualization of bone structures and surrounding soft tissues (Smith et al., 2021). Magnetic resonance imaging (MRI). Used if damage to soft tissues, blood vessels, and nerves is suspected (Goncharov et al., 2019). Ultrasound examination (US). Effective in diagnosing hematomas and soft tissue injuries (Chen et al., 2022).

The combination of these methods allows for comprehensive diagnostics and minimizes the likelihood of missing critical injuries.

2. Treatment of combined maxillofacial trauma

Treatment of patients with combined maxillofacial trauma is based on the principles of emergency care, restoration of the anatomical integrity and functionality of the affected structures.

2.1. Emergency medical care

The primary goal is to stabilize the patient's condition:

Ensuring airway patency. In case of severe injuries, tracheostomy is required (Brown et al., 2020).

Stopping bleeding using tamponade, coagulation or ligation of vessels (Alexandrov et al., 2021).

Infusion therapy and correction of hemodynamic parameters (Taylor et al., 2019).

2.2. Surgical treatment

Surgical treatment methods include:

Osteosynthesis of facial bones using miniplates and screws (Gavrilov et al., 2022). Repositioning and fixation of the jaws to restore occlusion (Müller et al., 2021). Plastic surgery to eliminate cosmetic defects (Romanov, 2020).

2.3. Conservative treatment

Includes antibacterial therapy to prevent infectious complications, analgesic support and physiotherapy procedures (Kumar et al., 2022).

3. Rehabilitation and improvement of the quality of life of patients

Rehabilitation of patients after SPLT includes several key aspects:

Functional rehabilitation. Restoration of chewing, speech and facial functions with the help of exercise therapy and special exercises (Pavlov et al., 2018). Psychological support. Many patients experience depression and social maladjustment, which requires the involvement of psychologists and psychotherapists (Jones et al., 2020). Prosthetics and implantation. In cases of significant loss of teeth and bone tissue, dental implantation is used (Lebedev et al., 2021).

Optimization of rehabilitation measures helps to improve the quality of life of patients, accelerate their social adaptation and reduce the risk of disability.

Conclusions

Combined maxillofacial trauma is a complex medical problem that requires an integrated approach to diagnosis, treatment and rehabilitation of patients. Modern imaging methods make it possible to accurately determine the nature of the damage, and surgical and conservative therapy methods ensure effective recovery. Rehabilitation measures, including functional restoration and psychological support, play an important role in improving the quality of life of patients. Further research in the field of traumatology and maxillofacial surgery should be aimed at developing new diagnostic and treatment methods that help reduce the rehabilitation period and increase the effectiveness of therapy.

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