ISSN NO: 2770-2936
Date of Publication:06-05-2023

Modern Approach to Comprehensive Rehabilitation of Patients with Face Defects

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Annotation. The article describes the issues of surgical treatment and rehabilitation of patients diagnosed with face-jaw deformity. Treatment and rehabilitation of patients with acquired maxillofacial defects (OMD) is one of the most urgent medical and social problems of modern dentistry. Wide-scale and integrated rehabilitation measures are important in the specialized dental care system, because OC is often accompanied by serious aesthetic and functional disorders, which, in turn, limit the patient's life activities, cause his inability to adapt to the social environment, and cause deep socio-psychological problems. causes problems.

Key words: facial defects, rehabilitation, maxillofacial trauma.

The subject of this study is a modern approach to patients with fractures of the jaws, bones of the face, defects of the jaws and face, deformation of the jaws, lesions of the temporomandibular joint, as well as congenital and acquired defects of the hard and soft palate, alveolar process and lips.

The purpose of this study is to rehabilitate patients with defects of the dentoalveolar system and facial defects. To achieve this goal, a study was made of the frequency, etiology, and pathogenesis, clinic, and diagnosis of defects and deformities of the dentoalveolar system; methods for prosthetics of defects of the face and jaws were developed, and post-traumatic and postoperative deformities of the face and jaws were prevented.

Examination of patients with injuries of the maxillofacial region includes clinical (general) research methods, as well as instrumental (additional) methods used to confirm or clarify the diagnosis established by the doctor during the initial examination of the patient.

The treatment of maxillofacial trauma is complex with the use of surgical, orthopedic, and physiotherapeutic methods, including wound treatment, bleeding control, repositioning and fixation of jaw fragments, infection control, patient care, therapeutic exercises, etc. All these activities are aimed at saving the lives of the victim, and restoration of the anatomical integrity and functions of the chewing apparatus.

The main task in the treatment of patients with fractures of the jaws is the provision of emergency and emergency care. Its solution includes the simultaneous implementation of the following main activities.

- Reposition - comparison or movement of fragments to the correct position, if there is displacement. Reposition must be carried out under anesthesia (local - conduction or general). It is carried out before immobilization. For this, the displaced fragments are compared and immediately fixed. If it is not possible to match the displaced fragments at once, they are repositioned gradually, over a period of time, with the help of traction;
- Immobilization - fixing the fragments in the correct position for the period necessary for their fusion (consolidation), ie to the formation of a strong bone callus. On average, this period is 4-5 weeks for an uncomplicated course of healing of a fracture of the upper jaw and a unilateral fracture of the lower jaw. With a bilateral fracture of the lower jaw, the consolidation of fragments occurs somewhat later, and therefore the immobilization period is 5-6 weeks;
- Drug treatment is aimed at preventing complications during the treatment period. Prescribe antibacterial drugs for open fractures, drugs that improve the rheological properties of blood and tissue microcirculation, antihistamines, immunostimulants, and drugs that optimize osteogenesis;
- Physical methods of treatment are used to improve tissue tropism and prevent complications.

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Introduction

Treatment and rehabilitation of patients with acquired maxillofacial defects (OMD) is one of the most urgent medical and social problems of modern dentistry. Wide-scale and integrated rehabilitation measures are important in the specialized dental care system, because OC is often accompanied by serious aesthetic and functional disorders, which, in turn, limit the patient's life activities, cause his inability to adapt to the social environment, and cause deep socio-psychological problems. causes problems.

Changes in the socio-political system of the country and the environment, the aging of the population over the last decades did not affect the health of the people living in our country. Such changes have led to an increase in the number of oncological diseases, including head and neck diseases.

Unfortunately, the country's official statistics do not have information on the frequency of occurrence of OYuJN. Failure to keep state statistics of this category of patients will inevitably have a negative impact on the organization, planning and optimization of orthopedic dental care based on real needs. Only the specific and limited data presented in the literature can give an idea about the periodicity of occurrence of maxillofacial defects in different groups of the population and the annual increase in the number of patients who need prosthetics.

In some studies of doctors working in the clinic, the question of the feasibility of using new constructions of face-jaw prostheses in order to increase the efficiency of rehabilitation of patients suffering from OYUJN has been put forward. But there are advantages of using one or another type of jaw prostheses in the practice of maxillofacial orthopedics. At the same time, it is also important to organize comprehensive rehabilitation measures taking into account the quality of life of patients belonging to this category. The analysis of the literature showed that most dental organizations do not operate in this direction, there is no perfect system of social support and specialized dental assistance program, rehabilitation in serious disorders related to breathing, swallowing, phonation, speech and chewing, until now, it is not possible to manage this category of patients. no clear concept has been created.

It is especially difficult to rehabilitate patients with acquired defects of the upper jaw, which cause serious damage to vital functions such as breathing, swallowing, vocalization, speech and chewing. To date, there is no clear concept of management of this category of patients, and there is no consensus on the use of jaw prostheses.

The main attention of Russian scientists who conducted scientific research in this direction is focused on the aspects of the problem related to surgery, and the clinical and organizational issues related to further orthopedic rehabilitation have been little studied. The lack of follow-up in the work of maxillofacial surgeons and dentists, their consistent and careful participation in rehabilitation activities, examination and treatment stages, and also the lack of keeping up with the achievements of modern orthopedic dentistry play a negative role. The fact that the science of dental biomaterials and the modern possibilities of optimizing the constructions of maxillofacial prostheses have not been put into practice also means the necessity and relevance of comprehensive clinical and organizational research.

One of the biggest problems of the orthopedic dental care system for patients with OA is the lack of a comprehensive approach to their rehabilitation. This problem was determined based on sociological research and expert opinion, and it is of great importance. The analysis of the available literature showed that there is almost no information on the issues of complex rehabilitation of patients with SCI.

Facial and jaw defects are formed due to congenital anomalies, injuries, surgical operations performed to eliminate oncological diseases. Patients of this category suffer not only from disturbances of vital functions (chewing, speech), but also from aesthetic defects. As a result, deep mental problems are formed. Patients with a defect go through several steps in adapting to their new living conditions: from physical and aesthetic adaptation to living with a prosthesis, to accepting their new and unusual situation. This condition puts the problem of returning patients belonging to this category to daily life on the agenda, and the issue of complex rehabilitation plays an important role in its success. In this regard, a great responsibility is placed on the dentist.

Materials and method.

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It is known that rehabilitation can be defined as a set of measures that includes the processes from the formation of the simplest skills to a person becoming a full member of society. The result of rehabilitation is manifested through the effect of influencing the person and his mental and physical activity. This is the essence of the model that we have developed and is focused on the rehabilitation of patients with OYuJN. Not all patients will need orthodontic support after surgical procedures to eliminate the causes of OA, and this point is proven by the statistical data presented in the third chapter of this study. However, the scope of assistance provided to the category of patients receiving orthopedic treatment is limited by the preparation of maxillofacial prostheses and their inefficient use.

In contrast to adaptation, which is defined as a method of adaptation using the reserve capabilities of the organism, rehabilitation means recovery, activation. In the process of rehabilitation, the compensation mechanism is directed to overcome the existing defect, while in adaptation, it is used for adaptation. From this point of view, rehabilitation is a set of measures aimed at returning the patient to an active lifestyle in society. Although this process is limited in time, it actually continues continuously.

It is necessary to distinguish the following types of rehabilitation: medical, psychological, pedagogical, socio-economic, professional, domestic.

Medical rehabilitation takes an important place in the complex of rehabilitation measures. Restoring the integrity of the lost limb or its part (jaw, palate, alveolar ridge, etc.) is the initial stage. Medical rehabilitation is aimed at restoring or replacing one or another function of the body that has been completely or partially lost. At this stage (after surgical intervention), the most important and major responsibility of medical rehabilitation falls on the dentist-orthopedic check. The main goal in this situation is orthopedic treatment, i.e. tooth-jaw prosthetics. The prosthesis should serve to restore the lost functions and achieve the greatest possible cosmetic effect. But taking into account that living with a face-jaw prosthesis is a new situation for the patient, the dentist-doctor should take on a number of psychotherapeutic functions. At this stage, a spiritual approach is also included among the rehabilitation measures. Mental rehabilitation is aimed at eliminating the mental image of a patient with acquired facial-jaw defects, which is formed due to a physical defect - a problem in the face-jaw area, and which indicates that he feels that he is not needed by anyone as a person.

The third stage of rehabilitation activities is social rehabilitation, which includes aspects such as gradual adaptation of a person to the social environment related to work and household life, restoration of professional qualities and orientation to reasonable employment. This process should be formed from a complex of medical, pedagogical, professional, and mental activities aimed at restoring the working capacity and health of persons with limited capabilities as a result of injuries in the area of the prosthetic face and jaw and head diseases .

The process of social adaptation of a person is a very complex social phenomenon, which covers various aspects of human life. An important task of the adaptation process is the problem of survival, combining the capabilities of the individual organism with the potential of the natural and social environment.

Social adaptation is a person's ability to live in harmony with a changing social environment. It has two forms - active and passive. An active individual tries to influence the social environment in order to change it, while a passive individual is indifferent to relations with it.

The following mechanisms should be used in the process of adaptation of patients with acquired maxillofacial defects:

1. *Cognitive* - includes all mental processes related to cognition - feeling, feeling, reasoning, memory, thinking, imagination, etc.
2. *Emotional* - includes various moral principles and emotional states - anxiety, worry, sympathy, resentment, sadness, etc.
3. *Practical (behavior*) is a criterion that determines a person's specific activity in social life.

In the daily practice of orthopedist-dentist doctors, the issues of rehabilitation, especially mental actions, are hardly discussed. Taking this into account and based on the above considerations, we have created and proposed a model aimed at comprehensive rehabilitation of patients with maxillofacial defects (Fig. 1).

ISSN NO: 2770-2936
Date of Publication:06-05-2023

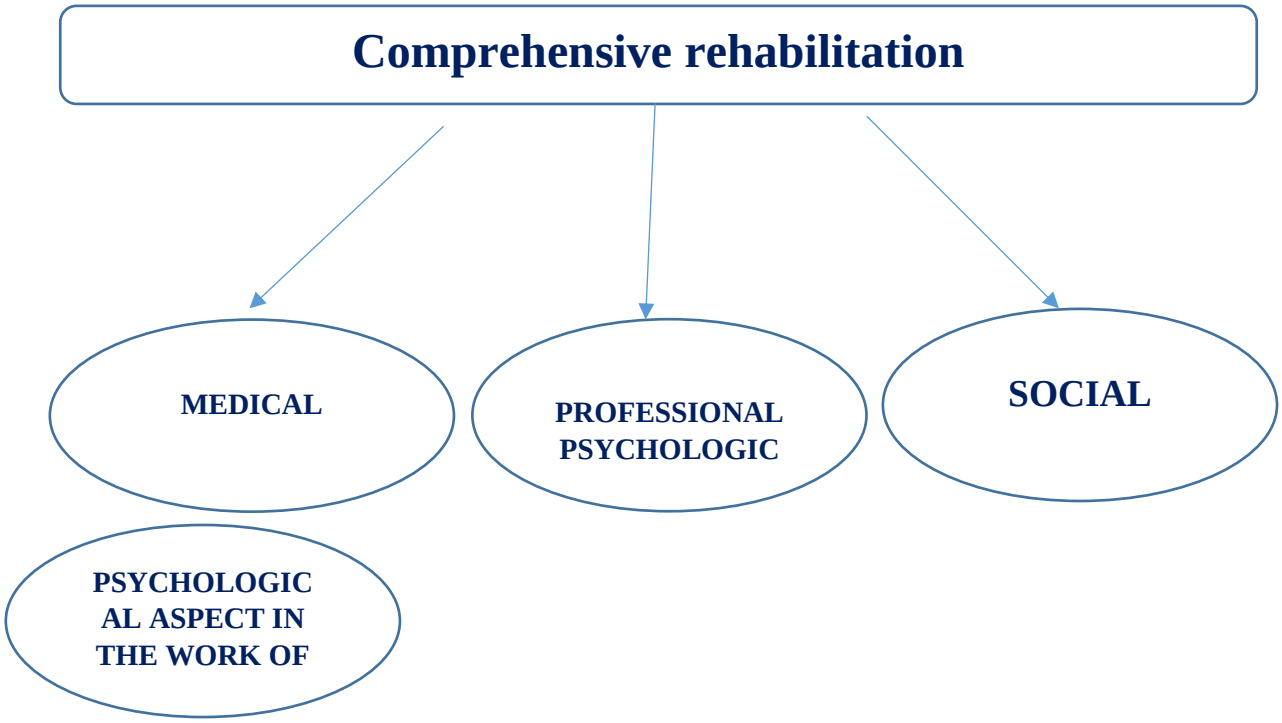

Figure 1. Stages of complex rehabilitation of patients after surgery for facial and jaw defects

At this stage, the first communication of the orthopedist-stomatologist with the patient is of particular importance. The main task of the specialist in this process is to establish a relationship with the patient. Patients diagnosed with an oncological disease in the face-jaw area usually have a changeable mental state, and at the same time, they are open to communication with the doctor. Patients with injuries or damage from the same area have relatively deep psychological problems, and these processes are accompanied by such conditions as depressed mood, depersonalization, avoidance of communication. The importance of the orthopedic-dentist doctor's communication with the patient in the inpatient setting is explained by the fact that during the conversation he, as an expert, explains the possibility of restoring the lost functions and appearance, outlines the perspective of mutual relations, and clarifies the issue of the period and time of prosthetics of the face and jaw area. Through this, several important tasks are solved: the principles of follow-up between specialists are ensured, the volume of work is planned, and most importantly, the patient is given hope for the future with information about the prospects of recovery after the injury, and thus psychological support is provided.

From an organizational point of view, this process is of particular importance. Follow-up between institutions and dental organizations that perform surgical interventions in the maxillofacial area is ensured by an examination (interview with the patient) conducted by an orthopedic dentist. This can be done in several ways: the orthopedist-dentist can stay on staff as an official employee of the surgical center (dispensary) or act as a "visiting" consultant. In our opinion, the last option is preferable. The information supply of these relations is the first important issue. Information about the patient should be sent from the hospital to the dental

ISSN NO: 2770-2936
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institution where the orthopedic dentist's main place of work is listed. To achieve this goal, we have developed a special document - "Notice on patients in need of orthopedist-dentist consultation".

A message from the surgical inpatient is sent by an authorized person to the dental facility, after which a consultation time is agreed and scheduled. After such a meeting, the patient has the desire and determination to go through the next stages of the treatment process. Relatives of the patient can also participate in this communication.

The second stage of rehabilitation is directly related to orthopedic treatment. At the stage after the surgical intervention, based on the condition of the person, as well as the level of readiness of the prosthetic corridor, the patient is sent to a dental institution, where he is seen by an orthopedic-dentist doctor who spoke in an inpatient setting.

At the stage aimed at restoring the lost functions, the face-jaw area is prosthetics, and it is during this period that the role of mental support of the dentist increases immeasurably. Prosthesis, on the one hand, restores the integrity of lost limbs and, in addition, the functions associated with it, on the other hand, living conditions with a prosthesis provide new sensations. The orthopedist-dentist should help the patient adapt to the new situation through conversation, persuasion, examples and recommendations. One of the effective methods of this process can be the creation of an individual work plan designed to monitor the dynamics of the patient's condition. We have created a special diary for assessing the condition of a patient with maxillofacial prosthesis (Appendix 6). This document is attached to the form 043/u "Medical card of a dental patient", it is convenient and easy to use, as well as rich in information. The application, literally, consists of a set of scales that reflect the patient's general state of mind. At each visit of the patient, the orthopedist-stomatologist evaluates and records the patient's condition based on the appropriate scale. The rating system is based on a one-to-eight score for each scale. The mental picture and its dynamics are evaluated according to the following principle: the lower the score on each scale, the more positive the mental state of the patient.

A professional psychotherapist can also participate in this stage. He conducts cognitive psychotherapy to help the patient accept himself in a new way, realize his identity and return to his daily life. The orthopedist-dentist should assess the level of recovery of functions lost after the defect by conducting tests. The patient should be given recommendations on the use and care of the prosthesis. It is also required to correctly assess the possibilities of continuing professional activity.

At the third stage, in cooperation with medical and social experts (rehabilitation specialists) and professional psychologists, measures should be taken to adapt the patient with facial and jaw defects to the new conditions of professional activity. For this purpose, the conclusion (prognosis) and recommendations of the orthopedist-stomatologist are given to the patient to take into account in the third stage of rehabilitation.

Conclusion

In general, these socio-psychological mechanisms that serve the social adaptation of a person are a whole system. At the heart of the social adaptation of the person lies active or passive adaptation, interaction with the existing social environment, as well as the ability of the person to change himself based on quality indicators.

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