

## ASPECTS OF ADAPTATION TO DENTURES AND USING DRUGS CORRECTLY

Normuratov Aziz Normuratovich  
Karaev Shakhboz Farmon ugli  
Samarkand State Medical University

### Abstract:

The process of adaptation to dentures in patients is influenced by local and systemic factors. The data on the influence of the type of higher nervous activity on the process of adaptation to dentures and on the temporal and physiological characteristics of the formation of an adaptive response are presented. The results of experimental and clinical studies of the effect of local and systemic use of drugs of various pharmacotherapeutic groups on the parameters of adaptation of patients to dental structures are analyzed. The effectiveness of the use of drugs with stress-protective, antioxidant and antitoxic effects was noted.

**Keywords:** dental prosthetics, adaptation to dental structures.

### Introduction:

Rehabilitation of patients who have completely or partially lost their teeth is an urgent problem of orthopedic dentistry. Modern technologies make it possible to carry out effective orthopedic treatment and manufacture high-quality dentures taking into account the individual parameters of the patient. However, it is not enough to make an appropriate prosthesis, it is important to restore full functional activity and psychological comfort of the patient. Functional rehabilitation after dental prosthetics is no less difficult task in modern dentistry than prosthetics itself. It is known that 40% of patients have to adapt to poor-quality dental structures for a long time, and about 30% of patients do not use removable dentures due to problems with adaptation. Therefore, for many years, the interest of dental scientists in solving the problem of patients' adaptation to removable dentures and orthopedic treatment in general has not weakened. The problem of adaptation to dental structures is multifaceted and still insufficiently studied. Many functional systems of the body are involved in the mechanisms of adaptation to dentures. Among them, the central nervous system (CNS) plays

the main role, the activity of neurophysiological and metabolic processes, as well as other systemic and local adaptive factors depend on the functioning of which. The so-called stress-limiting systems of the body play an important role in adaptive mechanisms. Important in these processes are time-physiological factors, from the point of view of which adaptation is a wave-like process with a clearly defined rhythm. Systemic factors of adaptation to dentures Adaptation of patients to removable dentures is, as a rule, a complex and lengthy process, which is influenced by a number of factors. Some features of the adaptation process are common and differ in different people, which is explained by the individual characteristics of the organism. Traditionally, there are two interrelated components of the adaptation process: psychological and functional adaptation. Psychological adaptation is more unstable and largely depends on the type of higher-order functional and neural activity in the central nervous system. Functional adaptation is more complex when it comes to the movements necessary for speech, chewing food and normal facial expressions. This requires a significant restructuring of the usual motor stereotypes, taking into account the new orthopedic structures. Such a psychophysiological restructuring takes a long time and is determined by the speed of neural processes. Adaptation can be considered as a complex of adaptive reactions at different levels, leading to the formation of persistent structural traces of adaptation, the content of which is complete adaptation to the factors that caused disharmony. The body's response when interacting with orthopedic dental structures is formed in accordance with the capabilities of the body, which are determined by the intensity of the influencing factors, the duration of exposure and the availability of functional and metabolic resources. The degree of adaptation is determined primarily by systemic factors, such as the state of the body (presence or absence of concomitant diseases, age), the type of activity of the higher nervous system, psychological state, etc. The type of GNI The patient's adaptation to a complete removable prosthesis is greatly influenced by the functional state of the central nervous system, the level of personal and situational anxiety. It is not by chance that many researchers have shown that the effectiveness of orthopedic rehabilitation in dentistry largely depends on the full consideration by the orthopedic surgeon of not only the clinical and morphofunctional characteristics of the patient, but also his psychoemotional state and personal characteristics. It

is noted that even if the morphofunctional characteristics of the alveolar system, the features of the general physical condition of the patient and the quality of the prosthesis are relatively similar, the process of adaptation to them occurs in different ways: in more than 40% of cases, the difficulties of adapting the patient to the manufactured structure do not depend on its design features and technical characteristics, but are largely determined by the mental state of the patient. largely determined by the mental state of the patient. Clinical studies convincingly demonstrate the influence of the type of higher nervous activity and the patient's temperament on adaptation to complete removable prostheses. The type of higher nervous activity (HNI) is understood as innate and acquired features of the nervous system that determine the nature of the interaction of the organism with the environment and affect all functions of the body. The significance of innate and acquired aspects of higher nervous activity depends on the conditions. In extreme conditions, innate mechanisms of higher nervous activity come to the fore, and I.P. Pavlov identified four types of temperament with different adaptive capabilities and resistance to neuroexcitators (Choleric, sanguine, phlegmatic and melancholic can be clearly distinguished. According to literature data, the melancholic type is characterized by the most difficult adaptation to complete removable prostheses, which is explained by the peculiarities of the properties of the nervous system of this type of temperament, namely, the predominance of inhibitory processes over excitatory and low motor capabilities. Adaptation processes in melancholics can be difficult without sufficient reason. Unfortunately, the determination of the psychological characteristics of the patient is not included in the diagnostic protocol of the consultation, which does not allow orthopedic dentists to use psychological testing methods to adequately prepare the patient for treatment and effective subsequent adaptation to prosthetics. However, since these methods are subjective in nature, they cannot objectively assess the patient's adaptation to dental structures and predict the duration of adaptation. Therefore, there is an urgent need to search for indicators that objectively integrate the patient's adaptation to dental structures. Temporal physiology. Aspects of temporary physiology are of great importance in the process of adaptation to removable dentures. If during the adaptation period to take into account the peculiarities of changes in general and local physiological parameters of the body during the

day, it is possible to shorten the adaptation period and achieve physical and psychological comfort earlier when using removable dentures. It is shown that the most favorable time interval for the "initiation" of adaptation and its more adequate course is the time interval corresponding to the total volume of oral fluid, tactile sensitivity of the oral mucosa and the minimum indicator of systolic blood pressure, taking into account the chronoprofile of the patient. Such tactics of management of dental patients with complete absence of teeth allows optimizing the process of adaptation to removable plate prostheses and reducing its duration. Age. The duration of adaptation to removable dental structures is also determined by the age of the patient. In elderly patients, especially with signs of cognitive decline in higher mental functions (memory, attention, thinking), the duration of adaptation may be delayed for several months, or qualitative adaptation may be absent. With age, the inhibitory effect of the cerebral cortex on the subcortical centers weakens. Therefore, psychophysiological aspects are of particular importance in the process of adaptation in the elderly. In such patients, it is important to prevent and eliminate all possible stress factors during prosthetics, as well as to carry out pharmacological correction of the process of adaptation to dentures with the help of stress-protective agents and adaptogens. Pharmacological correction of the process of adaptation to dentures. Pharmacological means are used to optimize the process of adaptation to removable dentures. The literature describes studies in which drugs of local and systemic action are used for this purpose. For example, the effectiveness of local ozone therapy in elderly patients with removable prostheses has been shown. Local application of ozone contributed to the improvement of a number of clinical and experimental indicators of the state of the prosthesis base and oral tissues, as well as generally increased the effectiveness of orthopedic treatment of patients with removable prostheses and improved their long-term prognosis. Topical application and mouthwash with antiseptic solutions are widely used, such as decoction of chamomile flowers, decoction of oak bark, 0.06% solution of chlorhexidine bigluconate and tincture of calendula. These drugs have an antiseptic and anti-inflammatory effect on the oral mucosa and periodontal tissues, creating conditions conducive to both local and systemic adaptive reactions. Adaptation problems arise when oral hygiene is violated in patients with removable dentures. Modern disinfectants for the care

of removable dentures and their rational use make it possible to normalize and optimize the adaptation process. The local use of means with pronounced antioxidant and antihypoxic effects in dentistry has proved to be highly effective. In experimental models of inflammation, it was found that hypoxene potentiates the anti-inflammatory effect of nonsteroidal anti-inflammatory drugs, which themselves exhibit a moderate anti-inflammatory effect. The possibility of individualized pharmacological modification of the patient's adaptation to prostheses formed in the oral cavity is investigated. Among the pharmacological methods of treatment, the use of substances with immunomodulatory activity is considered, normalizing the altered parameters of local and systemic immunity and improving the quality of the adaptive response that occurs in the process of "getting used" to the installed prosthesis. Among systemic drugs to improve the process of adaptation to orthopedic structures, those that affect the level of anxiety of patients and have a stress-protective effect are often used [3]. Clinical studies show that a significant part of the adult population is afraid of dental treatment. Ensuring the psychological comfort of the patient is an important factor in the safety of dental treatment and the formation of an adaptive response to dental prosthetics. Stress is a non-specific reaction of the body to severe physical or psychological shocks, the action of which is aimed at adapting to these shocks. The intensity and direction of the stress reaction is determined by various neurochemical systems, one of the main of which is the catecholaminergic system. Since most procedures in the maxillofacial area, including dental prosthetics, are associated with pain, many patients experience psychoneurotic tension, anxiety and fear when visiting the dentist. Approximately 10% of the adult population have a strong fear of dental treatment, and 35% have a strong or moderate fear. For such patients, a visit to the dentist is psychoemotional stress. During treatment, hemodynamic parameters, respiration and blood glucose levels may change in such patients, sweating may increase and existing physical diseases may worsen, which leads to a slowdown in the process of adaptation to dental structures. All these factors undoubtedly affect the quality of treatment and should be taken into account in the work of doctors. Benzodiazepine derivatives can be used for pharmacological modification of the psychoemotional state of patients during a dental appointment. Benzodiazepine derivatives effectively suppress anxiety,



anxiety, fear, emotional tension and have a pronounced stress-protective effect. However, the use of benzodiazepines, which have a pronounced sedative and muscle relaxation effect, leads to a violation of concentration, speed of reactions and reduces the patient's ability to work. Due to the possibility of developing drug dependence, these drugs are used for a short time. In addition, the use of these drugs requires strict accounting and administration and cannot be used only by dentists. These factors indicate the need for further search for effective and safe stress-protective agents that could be used exclusively by dentists, including in orthopedic dentistry. The literature presents the results of many studies on pharmacological protection against stress in dentistry.

## Conclusion:

The problem of adaptation to removable dental structures (prostheses) is one of the most important in orthopedic dentistry, as it largely determines the success of dental prosthetics. Adaptation to removable dentures is a complex and lengthy process, depending on many local and systemic factors. However, the most important role in the adaptation process is played by neurophysiological mechanisms that ensure the development of adaptive reactions of the central and peripheral (autonomic and somatic) nervous systems to qualitatively different sensory stimuli coming from the oral cavity. Adaptation to dentures, of course, depends on the morphofunctional characteristics of the dental system of the patient, but to an even greater extent - on the functioning of the central nervous system and the type of higher nervous activity. To optimize the patient's adaptation to removable dental structures, local and systemic use of various pharmacological agents is possible. As a means of systemic action, anxiolytic and stress-protective drugs are usually used. When choosing pharmacological means of correcting the adaptive reaction, the patient's age, the functional activity of the central nervous system and the type of higher nervous activity should be taken into account. Patients with a melancholic temperament require more intensive pharmacological modulation of the process of adaptation to dentures.

## REFERENCES:

1. Astanovich A. D. A. et al. The State of Periodontal Tissues in Athletes Engaged in Cyclic Sports //Annals of the Romanian Society for Cell Biology. – 2021. – C. 235-241.
2. Astanovich A. A. Comparative Analysis of the Stress-Strain State of the Lower Jaw with Different Splinting Systems in Localized Periodontitis of Middle Gravity by Finite Element Modeling //Scholastic: Journal of Natural and Medical Education. – 2023. – T. 2. – №. 5. – C. 181-187.
3. Ortikova N., Rizaev J. THE PREVALENCE AND REASONS OF STOMATOPHOBIA IN CHILDREN //E-Conference Globe. – 2021. – C. 339-341.
4. Ахмедов А. А. Иммунологические аспекты патогенеза гингивита и пародонтита //IQRO. – 2023. – Т. 3. – №. 2. – С. 121-123.
5. Ортикова Н. POLITICAL ELITE AS A SCIENTIFIC PROBLEM //МЕЖДУНАРОДНЫЙ ЖУРНАЛ КОНЦЕНСУС. – 2021. – Т. 2. – №. 1.
6. Alimjanovich R. J., Khairullaevna O. N., Normuratovich N. A. CORRECTION OF PSYCHOLOGICAL STRESS IN CHILDREN WITH NON-PHARMACOLOGICAL METHODS OF DENTAL ADMISSION //Archive of Conferences. – 2021. – C. 108-114.
7. Xairullaevna O. N., Alimjanovich R. J. Improving the effectiveness of therapeutic and preventive measures by correcting psychoemotional stress in children at a dental appointment. – 2022.
8. Maxzuna U., Zarafruz B. IMPROVING THE PROVISION OF THERAPEUTIC DENTAL CARE TO PREGNANT WOMEN //Web of Scientist: International Scientific Research Journal. – 2022. – Т. 3. – №. 11. – C. 618-623.
9. Zarafruz B., Hekmat K. H. A. S. MANIFESTATION OF HERPETIC INFECTION IN THE ORAL CAVITY AND THEIR TIMELY ELIMINATION //Spectrum Journal of Innovation, Reforms and Development. – 2022. – Т. 10. – C. 47-52.
10. Qobilovna B. Z., Nodirovich E. A. EVALUATION OF ORTHOPEDIC TREATMENT WITH REMOVABLE DENTAL PROSTHESES FOR PATIENTS WITH PAIR PATHOLOGY //Spectrum Journal of Innovation, Reforms and Development. – 2023. – Т. 11. – C. 95-101.

11. Ruziyeva K. A., Burhonova Z. K. K. Complex Application Of Magnetic Laser Therapy And Propolis Tincture For The Prevention And Treatment Of Chronic Recurrent Aphthous Stomatitis //The American Journal of Medical Sciences and Pharmaceutical Research. – 2021. – Т. 3. – №. 06. – С. 127-130.
12. Абдуллаева Н. ИСКРИВЛЕНИЕ ШПЕЕ ПРИ ЗУБОАЛЬВЕОЛЯРНОМ УДЛИНЕНИЕ У ДЕТЕЙ С ВТОРИЧНЫМИ ДЕФОРМАЦИЯМИ ЗУБНОГО РЯДА //Collection of scientific papers «ΛΟΓΟΣ». – 2023. – №. May 26, 2023; Boston, USA. – С. 344-348.
13. Jamshed S. PREVALENCE OF PHYSIOLOGICAL BITE FORMS IN PEOPLE WITH DIFFERENT FACE TYPES //Web of Scientist: International Scientific Research Journal. – 2022. – Т. 3. – №. 11. – С. 451-454.
14. Makhmudova U. B. The Effectiveness Of The Use Of Parapulpal Pins (Ppp) When Restoring Defects In The Crown Part Of The Frontal Teeth //Asian journal of pharmaceutical and biological research. – 2022. – Т. 11. – №. 2.
15. Bakhtiyorovna M. U. Causes Of Removable Denture Breaks And Allergic Reactions //Spectrum Journal of Innovation, Reforms and Development. – 2022. – Т. 10. – С. 374-377.
16. Bustanovna I. N. Assessment Of Clinical And Morphological Changes In The Oral Organs And Tissues In Post-Menopause Women //Thematics Journal of Education. – 2022. – Т. 7. – №. 3..
17. Nizomitdin A. I. Therapeutic Effect Of Improved Enamel Surface Preparation Technique In The Treatment Of Acute Initial Caries Of Temporary Teeth In Children //Web of Scientist: International Scientific Research Journal. – 2022. – Т. 3. – №. 11. – С. 440-445.
18. Jamshed S. Prevalence Of Physiological Bite Forms In People With Different Face Types //Web of Scientist: International Scientific Research Journal. – 2022. – Т. 3. – №. 11. – С. 451-454.
19. Nazhmiddinovich S. N., Obloberdievich S. J. Optimization of Orthopedic Treatment of Dentition Defects in Patients with Chronic Diseases of the Gastrointestinal Tract //Eurasian Research Bulletin. – 2023. – Т. 17. – С. 157-159.
20. Ахмадов И. Н. КЛИНИЧЕСКИЕ ОСОБЕННОСТИ И ПРИНЦИПЫ ЛЕЧЕНИЯ АЛЛЕРГИЧЕСКОГО СТОМАТИТА ПРИ ИСПОЛЬЗОВАНИИ



ЧАСТИЧНЫХ И ПОЛНЫХ СЪЕМНЫХ ПЛАСТИНОЧНЫХ ПРОТЕЗОВ  
//ББК 72 И66. – 2021. – С. 262.

21. Ахмадов И. Н. Нарушения в системе перекисного окисления липидов при парадантозе //IQRO. – 2023. – Т. 3. – №. 2. – С. 124-127.

22. Ахмадов И. ОБЗОР СРЕДСТВ ДЛЯ ФИКСАЦИИ ЗУБНЫХ ПРОТЕЗОВ //ЗБІРНИК НАУКОВИХ ПРАЦЬ НАУКОВО-ПРАКТИЧНА КОНФЕРЕНЦІЯ З МІЖНАРОДНОЮ УЧАСТЮ ТА НАВЧАЛЬНИМ ТРЕНІНГОМ З ОВОЛОДІННЯМ ПРАКТИЧНИМИ НАВИКАМИ «СУЧАСНІ МЕТОДИ ДІАГНОСТИКИ, ПРОФІЛАКТИКИ ТА ЛІКУВАННЯ ОСНОВНИХ СТОМАТОЛОГІЧНИХ ЗАХВОРЮВАНЬ». – 2021. – С. 43

23. Ikramova F. F. Ikramova Application of lymphotropic therapy for complicated forms of varicosis of the lower limbs: Application of lymphotropic therapy for complicated forms of varicosis of the lower limbs //Архив исследований. – 2021.

24. Shoxrux S., Shoxrux I., Faxriddin C. PREVENTION AND TREATMENT OF ORAL INFECTIONS IN DENTURE WEARERS //International Journal of Early Childhood Special Education. – 2022. – Т. 14. – №. 4.

25. Fakhridin C., Shokhrux S., Nilufar I. ENDOKANAL PIN-KONSTRUKSIYALARNI ISHLATISHDA ASORATLAR VA XATOLAR TAHLILI //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2022. – Т. 7. – №. 1.

26. Fakhridin C., Shokhrux S., Nilufar I. ENDOKANAL PIN-KONSTRUKSIYALARNI ISHLATISHDA ASORATLAR VA XATOLAR TAHLILI //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2022. – Т. 7. – №. 1.