

# ASSESSMENT OF THE QUALITY OF LIFE OF ELDERLY PATIENTS WITH ORTHOPEDIC TREATMENT AND DISEASES OF THE ORAL MUCOSA

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**Abstract:** Low awareness of patients about the rules for the use of orthopedic structures and their care adversely affects the quality of their life, and also affects the increase in the incidence of the oral mucosa. Methods for the prevention and treatment of this pathology are proposed.

**Key words:** quality of life, oral cavity, mucous membrane, orthopedic treatment.

**Introduction.** In recent years, dentists have seen an increase in the number of people applying for diseases of the oral mucosa (SOPR) and the red border of the lips (CCG). More often this is due to the deterioration of the general somatic status of patients, new manifestations of systemic diseases on SOPR, a tendency to increase life expectancy, the adverse effects of occupational hazards, bad habits, local traumatic and allergenic factors of iatrogenic nature.

The multifactorial genesis of severe forms of SOPR pathology is most fully manifested in the elderly and senile age, as well as in patients with reduced immune resistance of the body, especially due to the presence of many chronic diseases, as well as in conditions of often complete or partial absence of teeth, low level of oral hygiene and dentures, impaired microbiocenosis and salivation. Atrophic and hyperplastic processes in the tissues of the oral cavity can be aggravated by local traumatic factors (prosthetic constructions, restorations, etc.), leading to the development of long-term non-healing, resistant to traditional therapy ulcers or hyperplasias with the possibility of malignancy.

Chronic diseases of SOPR are manifested by functional and aesthetic disorders that can lead to anatomical changes in the tissues of the oral cavity, including the prosthetic bed. Edema, erosion, atrophy, hyperplasia, sclerosis of SOPR, manifested by primary and secondary changes in the mucous membranes of the cheeks, palate, tongue, gums and in the corners of the mouth, create unfavorable conditions for the use of dentures, fixation of orthopedic structures and hygienic care [1, 2]. Anatomical and functional disorders detected by SOPR further reduce the already insufficient chewing efficiency in the absence of teeth. As a result, a joint solution to the problems relevant to therapists and orthopedic dentists is required: a reasonable choice of material and the actual design of the denture, sparing instrumental and technological support for prosthetic treatment, optimal timing of dental rehabilitation after prosthetics, rational choice of special means for fixing prostheses and hygienic care for them, special psychological patronage of the patient.

In modern specialized literature, the issues of improving conservative and drug treatment of SOPR diseases are more often touched upon [3], while insufficient attention is paid to orthopedic dental rehabilitation and the peculiarities of the prosthetic approach to patients with specific forms of SOPR pathology.

Undoubtedly, orthopedic structures can initiate the development of diseases of the oral cavity and be a complex problem in the rehabilitation of patients with diseases of SOPR and CCG. According to the literature, in patients with full removable laminar dentures, SOPR diseases are detected 3.3 times more often than in patients with intact dentition on both jaws [4]. Individualized rational prosthetics should consolidate the result of conservative treatment and contribute to the speedy elimination of structural, functional and aesthetic disorders that could be associated with both the defeat of the SOPR and the

absence of teeth. The ultimate goal of complex conservative and prosthetic treatment of patients should be to improve the quality of life (QOL) of a patient with chronic pathology of SOPR [5].

**The aim** of this study was to establish the role and determine the features of prosthetic treatment in complex dental rehabilitation and improvement of QoL indicators in patients with chronic diseases of SOPR.

**Materials and methods.** The study was conducted on the basis of the Department of Orthopedic Dentistry and Orthodontics of the Bukhara State Medical Institute named after Abu Ali ibn Sina. Patients who applied for medical advice on complaints of unsatisfactory previously made dentures, which led to diseases of SOPR and CCG, underwent a general clinical examination, which included: survey, examination, palpation, percussion, probing, calculation of index indicators. When evaluating General somatic status took into account the conclusions of the teaching staff of the department, extracts from outpatient cards.

Special attention was paid to assessing the initial level of dental care for patients with chronic pathology of SOPR: the presence of a systematic and integrated approach to treatment, the completeness of oral sanitation, the elimination of general and local risk factors, the selection of rational hygienic protocols, and, if necessary, the availability of dispensary observation of patients and its effectiveness.

The examination was carried out in 72 patients of both sexes (aged 40 to 65 years) with the most common pathology - lichen planus (CPL) SOPR and oral candidiasis, in whom, after a clinical examination, it was decided to conduct a prosthetic stage of complex treatment to consolidate the results of conservative treatment and the most complete restoration of the anatomical and functional state of the oral tissues.

The initial orthopedic status was assessed with an analysis of the type of available prosthetic structures, the orthopedic materials used, the quality of manufacture of prostheses and their hygienic condition. Since a wide range of materials, including metals, are used for the manufacture of prosthetic structures, special attention was paid to the possible presence of galvanism in the oral cavity in the pathology of SOPR. The results were processed statistically using the standard 2007 Microsoft Office software package.

Various test questionnaires, including the Eysenck test, were used as a tool for assessing the QoL of patients. The effectiveness of treatment from the standpoint of assessing the QoL of patients was analyzed by the method of Student's variational statistics with the calculation of the paired t-test. The differences were considered significant at  $p < 0.05$ .

**Outcomes.** The analysis showed that the structure of SOPR and CCG diseases was dominated by: CPL (28.5%), candidiasis (17.0%), chronic recurrent aphthous stomatitis (10.5%) and leukoplakia (8.5%). Various forms of precancerous diseases of CCG were detected in 3% of patients.

In most cases, SOPR diseases were accompanied by severe edematous-pain and xerostomy symptoms. Patients were concerned about the unusual appearance of the mucous membrane (80.4%), bad breath (78.6%), speech disorder and impaired diction (68.2%), aesthetic problems (63.6%).

An analysis of the orthopedic status in patients with CPL and candidiasis showed that 65.8% of the examined patients needed prosthetic treatment, while 45.2% had previously used dentures, however, preparation for orthopedic treatment was carried out without taking into account the pathology of SOPR and, therefore, without justifying the use of materials for structures and predicting possible complications - CPL and candidiasis of SOPR.

Unsatisfactory hygienic condition of removable dentures in the oral cavity was observed in 85% of patients. In 82.5% of cases, when assessing the quality of prostheses, chips, roughness, discoloration, cracks, undercuts, etc., were revealed, which was due not only to long-term use of prostheses, but also to aggressive hygienic cleaning of prosthetic structures (use of a brush too rigid for prostheses,

abrasive cleaners). None of the patients with removable prosthetic structures in the oral cavity used specialized safe and effective means to clean dentures.

Among patients using removable dentures, 77.8% had not previously used means to fix dentures in the oral cavity (35.5% of them were satisfied with the fixation of their prosthetic structures, and the rest did not know about the existence of such means); 25.0% of patients used fixation products, but were not satisfied with the quality of the latter or the organoleptic properties of the drugs used. Only 4 patients constantly used prosthesis fixation products.

All patients with CPL and candidiasis required prosthetics or replacement of existing structures with new ones. The decision on prosthetics was made when remission of CPL and candidiasis of SOPR was achieved after conservative treatment.

In the course of orthopedic rehabilitation, the following principles were adhered to. When prosthetics with fixed structures, a gentle mode of preparation of abutment teeth was used. Casts were obtained with alginate and silicone impression materials. Particular attention was paid to the edges of artificial crowns: they should not be sharp and sink deep into the periodontal groove, injuring the periodontal attachment. The intermediate part of the bridge should be flushed and tangential in shape; The saddle shape was excluded due to the high probability of pressure sores on the gums.

When choosing removable structures, preference was given to clasp prostheses whenever possible. In all cases, individual spoons and an unloading technique for obtaining functional impressions were used. Particular attention was paid to the correct design of the functional edge of the prosthesis with isolation of strands and bone protrusions. The quality of plastic polishing was taken into account - all surfaces of the prosthesis were rounded, sharp edges, roughness and undercut of the prosthesis were excluded. Good fixation and stabilization of the prosthesis are the key to successful orthopedic treatment of patients with SOPR diseases, so patients were advised to use special tools for fixing removable dentures (for example, Corega cream).

The most important component of the successful rehabilitation of patients with SOPR diseases is rational oral hygiene. Patients were advised to use effective and safe toothpastes for SOPR (Sensodyne F, Parodontax + fluoride), rinses with a pronounced anti-inflammatory effect without alcohol, toothbrushes of medium stiffness for the period of remission and soft - at the time of exacerbation of the disease SOPR.

Rational care of removable dentures that can form a microbial plaque on the surface is the most important component of perfect hygiene. To prevent the occurrence of prosthetic stomatitis, it was recommended to use specialized products for effective cleaning of dentures (for example, Corega Bio Formula tablets). The use of such agents with pronounced antimicrobial and antifungal activity [6, 7] prevents the occurrence of micro-scratches on their surface, allows you to extend the life of prostheses, as well as the appearance of Candida-associated prosthetic stomatitis.

After orthopedic rehabilitation of 48 patients with CPL or candidiasis of SOPR, 37 complete removable laminar prostheses (20 for the upper and 17 for the lower jaw), 30 partial removable laminar prostheses (18 for the upper and 12 for the lower jaw), 10 bridges and 47 single-standing crowns were made. After the completion of orthopedic rehabilitation and the period of adaptation to removable structures, test surveys were re-conducted, which confirmed that effective conservative treatment of destructive diseases of SOPR after rationally performed orthopedic treatment is not always accompanied by normalization of dental indicators.

**Conclusion.** The severity of the problem of orthopedic care is associated with the high need of patients for prosthetics, the increasing role of prosthetic structures as risk factors for the development of SOPR diseases, the lack of clear recommendations for working with these patients at the stages of complex treatment and medical examination, the lack of clear instructions for the regulated use of specialized prosthetic and oral care products, the psycho-emotional mood of doctors and patients. Individualized rational prosthetic treatment consolidates the result of conservative therapy and contributes to the

speedy restoration of impaired functions associated with both SOPR diseases and the absence of teeth, and also improves the QOL of patients.

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