

Comparative Assessment of Quality of Life in Orthopedic Treatment with Diseases of the Oral Mucosa

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Abstract:

Low awareness of patients about the rules for the use and care of orthopedic structures has a negative impact on their quality of life, and also affects the increase in the incidence of diseases of the oral mucosa. Methods of 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 been observing an increase in the number of people applying for diseases of the oral mucosa and red border of the lips (RCC). 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 impact 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 in connection with 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 under the influence of local traumatic factors (prosthetic constructions, restorations, etc.), leading to the development of long-term non-healing ulcers or hyperplasias resistant to traditional therapy with the possibility of malignancy.

Chronic diseases of the oral cavity 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, sclerosing of the 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 prosthetic structures and hygienic care [1, 2]. The anatomical and functional abnormalities detected by the SOPR further reduce the already insufficient chewing efficiency in the case of missing teeth. As a result, it is necessary to jointly solve the problems that are relevant for therapists and orthopedic dentists: a reasonable choice of the material and the design of the dental prosthesis, sparing instrumental and technological support of prosthetic treatment, the optimal timing of dental rehabilitation after

prosthetics, the rational choice of special means for fixing dentures and hygienic care for them, special psychological patronage of the patient.

In modern specialized literature, the issues of improving conservative and pharmacological treatment of SOPR diseases are more often touched upon [3], while not enough attention is paid to orthopedic dental rehabilitation and the peculiarities of the prosthetic approach to patients with specific forms of SOPR pathology.

Undoubtedly, orthopedic constructions can initiate the development of oral cavity diseases and be a complex problem in the rehabilitation of patients with SOPR and CCH diseases. According to the literature, patients with full removable lamellar dentures are diagnosed with SOPR diseases 3.3 times more often than those 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 lesion of the SOPR and the absence of teeth. The ultimate goal of comprehensive 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 comprehensive dental rehabilitation and improvement of QOL indicators in patients with chronic diseases of SOPR.

Materials and methods. The study was carried out on the basis of the Department of Orthopedic Dentistry and Orthodontics of the Bukhara State Medical Institute named after Abu Ali ibn Sino. Patients who sought medical and consultative assistance due to complaints about unsatisfactory dentures, which led to diseases of SOPR and CCG, underwent a general clinical examination, which included: questioning, examination, palpation, percussion, probing, calculation of index indicators. In the assessment Conclusions of the teaching staff of the department, extracts from outpatient records were taken into account.

Special attention was paid to the assessment of the initial level of dental care for patients with chronic pathology of oral cavity: the availability of a systematic and integrated approach to treatment, the completion of oral cavity sanitation, the elimination of general and local risk factors, the selection of rational hygienic protocols, and, if necessary, the availability of dispensary monitoring 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 (PSD) and oral candidiasis, in whom, after a clinical examination, it was decided to carry out the prosthetic stage of complex treatment to consolidate the results of conservative treatment and restore the anatomical and functional state of the oral cavity tissues as completely as possible.

The initial prosthetic status was assessed with an analysis of the type of prosthetic structures, orthopedic materials used, the quality 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. Results are statistically processed using standard Microsoft Office 2007.

Various test questionnaires, including the Eisenck test, were used as a tool for assessing the QoL of patients. The efficacy 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 a paired t-test. The differences were considered significant at $p < 0.05$.

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

In the majority of cases, SOPR was accompanied by pronounced edematous, painful, and xerostomic symptoms. Patients were bothered by an unusual appearance of the mucous membrane (80.4%), bad breath (78.6%), speech disorders and diction disorders (68.2%), and aesthetic problems (63.6%).

The analysis of the prosthetic status of patients with CPL and candidiasis showed that 65.8% of the examined patients needed prosthetic treatment, while 45.2% had previously used dentures, but the preparation for orthopedic treatment was carried out without taking into account the pathology of the prosthetic treatment and, therefore, without justifying the use of materials for constructions and predicting possible complications - CPL and candidiasis of the 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 dentures, chips, roughness, discoloration, cracks, undercuts, etc., were revealed, which was due not only to the long-term use of dentures, but also to aggressive hygienic cleaning of prosthetic structures (use of a brush that is too rigid for dentures, abrasive cleaners). None of the patients with removable prosthetic structures in the oral cavity used specialized, safe and effective products to clean their dentures.

Among the patients using removable dentures, 77.8% had not previously used means for fixing 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 preparations used. Only 4 patients used prosthesis fixation products on a regular basis.

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 the SOPR was achieved after conservative treatment.

In the course of orthopedic rehabilitation, the following principles were adhered to. In the case of prosthetics with fixed structures, a sparing mode of preparation of abutment teeth was used. Impressions were made 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 gingival groove, injuring the gingival attachment. The intermediate part of the bridge should be washable and tangential; The saddle shape was excluded due to the high probability of pressure ulcers on the gingiva.

When choosing removable structures, preference was given to clasp dentures, if possible. In all cases, individual spoons and an unloading method of obtaining functional impressions were used. Particular attention was paid to the correct design of the functional edge of the prosthesis with the insulation of cords and bony protrusions. The quality of plastic polishing was taken into account – all surfaces of the prosthesis were rounded, sharp edges, roughness and undercuts of the prosthesis were excluded. Good fixation and stabilization of the prosthesis is the key to successful orthopedic treatment of patients with SOPR diseases, so patients were recommended to use special means for fixing removable dentures (for example, Corega cream). The most important component of successful rehabilitation of patients with SOPR diseases is rational oral hygiene. Patients were advised to use effective and safe toothpastes (Sensodyne F, Parodontax + fluoride), mouthwashes with a pronounced anti-inflammatory effect without alcohol, toothbrushes of medium hardness for the period of remission and soft toothbrushes at the time of exacerbation of the disease of SOPR.

Rational care of removable dentures, which can form microbial plaque on the surface, is an essential 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 products with pronounced antimicrobial and antifungal activity [6, 7] prevents the occurrence of

microscratches on their surface, prolongs the life of dentures, as well as the appearance of Candida-associated prosthetic stomatitis.

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

Conclusion. The acuteness of the problem of orthopedic care is associated with the high need of patients for prosthetics, the increasing role of prosthetic constructions as risk factors for the development of SOPR diseases, the lack of clear recommendations for working with these patients at the stages of comprehensive treatment and medical examination, the lack of clear instructions for the regulated use of specialized means of care for prostheses and oral cavity, 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 diseases of the SOPR and the absence of teeth, as well as improves the QOL of patients.

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