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INFLUENCE OF DENTAL DEFECTS WITH ASSOCIATED PERIODONTITIS ON THE QUALITY OF LIFE

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ABSTRACT

To assess dental health for quality of life, special dental tests are used that are designed to measure the frequency, degree of influence of dental problems on functional and socio-psychological well-being. The purpose of the study was to assess the impact of dental defects and concomitant periodontitis on the quality of life. A study of the quality of life of 65 patients was conducted. A survey conducted among patients with dental defects and concomitant periodontitis revealed a significant deterioration in the quality of life before treatment, compared with the same individuals after treatment.

Keywords: dental defects, tooth loss, periodontitis, quality of life.

INTRODUCTION

Dental health is a condition that allows a person to eat functionally and improve communication functions, restore the aesthetic function of the oral cavity and face, and increase self-esteem. At the present stage of development of society, the provision of dental care to the population should have the ultimate goal of achieving and maintaining a functioning, painless, aesthetic and socially acceptable situation in the oral cavity throughout life for most people [8]. According to WHO definition, the quality of life is an integral characteristic of the physical, social, mental or emotional functioning of a person, based on subjective perception [19]. A subjective assessment of the quality of life, made by the patient himself, reflects his psychological status, the effectiveness of the treatment, allows you to determine the impact of the disease itself, as well as the treatment on the patient's condition. The symbiosis of subjective data on the quality of life and the objective conclusion of a doctor makes it possible to draw up a complete clinical picture of the disease [4]. To determine the effectiveness of measures aimed at improving and maintaining the health of the population, at present they began to use such a quantitative indicator as the quality of life [1]. The study of the quality of life is a highly informative, sensitive and economically sound method of assessing the health status of both the population as a whole and individual social groups, generally accepted in international practice [6,10,12]. It makes it possible to quantify the multicomponent characteristics of a person's life activity - his physical, psychological and social functioning [9, 18]. It is possible to assess the quality of life of one person, a group of people, various segments of the population and society as a whole. Most clinical studies evaluate health-related quality of life ("positive") [13,14,15]. The use of dental quality of life criteria in the practice of a dentist is especially important, since it allows a comprehensive assessment of not only the degree of dental health loss, but also its psychosocial, financial and economic consequences. A dynamic assessment of the quality of life in a dental patient makes it possible to assess the adequacy of the ongoing dental treatment and, along with traditional methods, is a full-fledged indicator of its effectiveness [5, 11].

Assessment of the quality of life in dentistry is based on the completion of special questionnaires (questionnaires). The practice of using general quality of life questionnaires to monitor the degree of loss of dental quality of life parameters and their restoration during treatment is not always justified from a methodological point of view. The answers to the questions are filled in by the dentist or the patient himself. Usually, the questions relate to how problems in the mouth affect the patient's physical well-being, his ability to eat well, communicate with other people, and perform social functions [2]. Each answer in the questionnaires corresponds to a certain number of points. The points scored for answers to all questions are summed up. The sum of points numerically characterizes the quality of life. All questionnaires are divided into general ones, i.e. designed to assess the state of the individual as a whole, and special, created to assess the state of the individual with a particular disease. In dentistry, as in other branches of medicine, special quality-of-life questionnaires are used. When assessing the quality of life in dentistry, it is assumed that dental health affects the physical and psychological state of a person, as well as his social well-being and communicative function [7]. The methodology for studying the quality of life also involves the use of standard questionnaires. In international practice, standard questionnaires are used, tested in clinical trials and clinical practice. The following requirements are imposed on these questionnaires for assessing the quality of life: multidimensionality, simplicity and brevity, acceptability, applicability in different linguistic and social cultures. Of the specialized validated questionnaires for the quality of life in domestic dentistry, the Russian version of the questionnaire "Profile of influence of dental health" OHIP-14 RU is mainly used. In 1997, Slide G. reduced OHIP to 14 questions for ease of use [17]. The possibility of using the quality of life criterion based on the dental questionnaire Oral Health Imact Profile (OHIP-14) was proved in a study by V. V. Smirnyagina (2007). OHIP-14 is the most commonly used quality of life questionnaire in dentistry. Its convenience lies in the fact that it contains only 14 questions, while the results obtained are reproducible [16].

MATERIALS AND METHODS

The study of the quality of life in patients of the main group and the control group was carried out using a validated Russian version of the OHIP-14 - RU questionnaire. The observation group consisted of 65 patients with dental defects and concomitant periodontitis according to the OHIP-14 RU index before and after treatment. A survey of 65 patients (35 women and 30 men) aged 20 to 55 years was conducted. The number of males and females experiencing difficulty in eating due to dental defects and concomitant periodontitis, was approximately the same. In patients with dental defects and concomitant periodontitis, the quality of life was studied using the OHIP-14-RU questionnaire. The questionnaire included 14 questions. There were five response options that ranged from "very often" to "never" and were scored on a scale of 5 to 1, respectively. The assessment of the quality of life was carried out by summing up the scores. All questions were divided into three blocks. The evaluation criteria were as follows - "never" - 0, "extremely rarely" - 1, "often" - 2, "usually" - 3, "always" - 4. The scores were summed up, and the highest scores meant deterioration in the quality of life. The data results were processed by standard methods of variation statistics, using statistical processing software packages Statistica 6.0 for Windows. Significance of differences (p) between groups was determined using Student's t-test (t).

RESULTS AND DISCUSSION

The largest share in the total values was made up of scores in responses to questions characterizing psychological discomfort, physical disability and function limitation (Table 1).

Scale	Before treatment n=65	After treatment n=65	p – significance level
Function limitation	2,8±1,1	0,3±0,1	0,033
Physical pain	2,6±1,1	1,3±0,2	0,212
Psychological discomfort	5,2±1,3	1,86±0,4	0,019
Physical disability	3,2±1,1	0,6±0,2	0,027
Psychological disability	2,4±1,1	1,84±0,7	0,622
Social disability	2,4±1,3	0,9±0,1	0,224

Table 1. Mean score on seven scales of the OHIP-14 questionnaire

Detriment	1,38±0,6	0,7±0,2	0,184
Score	19,98±5,2	7,5±2,5	0,033

CONCLUSION

Thus, the study indicates a direct relationship between the quality of life in patients with untreated dentition defects and concomitant periodontitis compared with the same patients after treatment. Complaints about problems associated with defects in the dentition and concomitant periodontitis, identified during the survey, in most patients did not affect the possibility of proper rest and did not depend on gender. The number of males and females experiencing difficulty in eating due to dental problems and concomitant periodontitis was approximately the same. The use of a questionnaire to study the quality of life level should be used both in epidemiological studies and in the practice of an orthopedic dentist. Studying priority issues, improvement in doctor-patient interaction should be determined using the OHIP-14 questionnaire. Due to questioning, it was found that defects in the dentition and concomitant periodontitis lead to a significant decrease in the quality of life.

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