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The Oral Mucosa When Using Removable Dentures Based on Implants in the Complete Absence of Teeth

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Relevance of the study. Cases of complete toothlessness are common among the population, with parodont diseases, complications of severe caries, resorption of bone tissue, and general somatic diseases as the main causes. In the rehabilitation of such patients, implants and plate prostheses of different appearance are widely used. However, one of the problems observed in practice is the frequent occurrence of inflammatory and dyscomfort conditions on the oral mucosa in the process of using prosthetic structures. This condition makes it difficult for patients to adapt to the prosthesis, makes the oral cavity lose track of its healthy state and reduces the effectiveness of prostheses. In this context, the subject of this dissertation is a very relevant and practice-oriented study.

Results and analyzes. The use of alpha-adrenomimetics (such as galazoline) can help with the gag reflex at the stage of addiction. Dental pathology of various etiologies, against the background of not always effective treatment, has a fairly high prevalence, despite the efforts of preventive medicine in general and dentistry in particular. One of the main reasons for patients seeking dental care is partial tooth loss. According to Russian and foreign literature, the percentage of such patients reaches 75%, depending on the country of residence and the quality of care. The causes leading to tooth loss are most often foci of chronic odontogenic infection, malocclusion and anomalies in the position of teeth. significant factors in the loss of the integrity of the dentition are periodontal diseases as a result of traumatic occlusion or its functional overload.

Tooth loss in patients aged 18 to 25 years is about 40%, while 70% of the population uses various orthopedic structures under the age of 65. Today, the problem of tooth loss is still relevant and contains medical and social aspects. Dental defects lead to persistent morphofunctional changes, speech disorders, exacerbation of comorbid pathology, against the background of a decrease in the overall resistance of the body, contributing to an increase in the number of requests for dental care. Unfortunately, tooth loss is an irreversible process, and the restoration of chewing function is possible only with orthopedic treatment using removable or non-removable structures.

The purpose of the study is to improve the effectiveness of orthopedic treatment by eliminating the effect on the mucous membrane of the oral cavity when using removable dentures that rely on implants in complete toothlessness Objectives of the study: Identification and assessment of Morpho-functional changes in the face-jaw at complete toothlessness; Study of atrophy levels of the upper and lower jaworveolar tumor bone in complete toothlessness with 3-D x-ray results;

Evaluation of the microbiological condition of the oral cavity when plate prostheses are applied that rely on implants in complete toothlessness;

Comparative evaluation of the effectiveness of fixable removable prostheses in various ways (telescopic, lock-key, balcony) that rely on implants in complete toothlessness. As the object of the study, 110 patients with complete secondary adentia, of which 35 patients with fixable removable prostheses with telescopic covers that rely on imlantants, 35 patients with fixable removable prostheses with Lock-key devices and 40 patients with removable prostheses with balconies. As the subject of the study, retrospective and prospective studies are carried out to study the morphometric parameters of patients without complete teeth and the X-ray status of the alveolar bone.

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Methods of improvement and prevention

- Impression technologies: o Intraoral scanning:

Preferable to traditional impressions, especially for hypersensitivity and gag reflex, providing a more accurate design.

- Constructive solutions: o Beam fixation system: Provides better fixation and reduces the base area of the prosthesis, reducing the impact on the mucous membrane and gag reflex.

Correction and relocation: Necessary to eliminate inaccuracies, restore contact with gums and prevent damage, carried out both immediately and during the adaptation period.

- Medical support:

The use of 0.1% galazoline solution before taking the impression or during the adaptation period to stop the gag reflex (lidocaine is less effective).

- Care and hygiene: o Regular cleaning of the prosthesis with a brush, paste and special products. o Using an ultrasonic bath to clean the prosthesis in the dentist's office.

The importance of careful hygiene of implants to prevent peri-implantitis. • Adaptation to the prosthesis:

Proper wearing: Wear the prosthesis while eating, take it off at night, and wear it constantly during the initial period.

Frequent corrections: The first corrections are within 1-2 weeks, up to 10 visits are possible for a perfect fit.

Problems and solutions

- Inflammation (stomatitis): It often occurs due to materials or poor-quality care, and requires regular checkups and corrections.
- Insufficient care: Patients with implants require special attention to hygiene, as there is no epithelial barrier to the implant. The combination of modern digital technologies, thoughtful design solutions and strict care rules helps to minimize discomfort and inflammation of the mucous membrane when wearing removable implant-supporting prostheses.

Conclusion. Methods of treatment are improved by comparative evaluation of the effectiveness of fixable removable prostheses in various ways that rely on implants in complete toothlessness (telescopic, lock-key, balcony) and selection of the most effective type of prosthesis depending on the degrees of atrophy. In ensuring long-term and effective maintenance of dentures, in creating the possibility of preventing diseases of the oral mucosa in patients, practical recommendations are developed that can be used in dental clinics. All of the above serve to improve the quality of life of patients in the process of prosthetics at complete toothlessness.

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