

**PREVENTION OF COMPLICATIONS IN REMOVABLE LAMELLAR PROSTHETICS****İsmaylov D.,***Doctor of Philosophy in Medicine, assistant***Guliyev M.,***Doctor of Philosophy in Medicine, assistant***Zeynalova Zh.***Doctor of Philosophy in Medicine, assistant**Department of Therapeutic Dentistry**Azerbaijan Medical University**Baku, Azerbaijan*<https://doi.org/10.5281/zenodo.8026670>**Abstract**

*The factors influencing the tissues of the oral cavity and the prosthetic bed, which contribute to the unsatisfactory functioning of removable lamellar dentures, as well as their premature failure, have been studied. Measures for the prevention of complications are summarized, which are divided into two groups: general preventive action and special therapeutic and preventive measures.*

**Keywords:** *removable plate dentures, prevention, general preventive and special treatment and preventive measures.*

According to many scientists, 70% - 95% of the population suffer from tooth loss. Preservation of the last tooth on the jaw, which does not have antagonists, is not unreasonable, especially in patients who are prosthodontized for the first time, since this tooth improves the fixation of the prosthesis, gives the patient greater confidence in using the prosthesis and greatly facilitates adaptation to it. In addition, with the removal of the last pair of teeth of the antagonists, the fixed interalveolar height is lost, which leads to a premature and complex restructuring of the neuroreflex regulation and contractile function of the masticatory muscles, and also significantly complicates the exact determination of the central ratio of the jaws [1]. Indeed, when a tooth is removed, irreversible changes occur in the periodontium and atrophic processes in the bone tissue become especially noticeable, since edentulous jaws are not adapted to the perception of chewing load [5, 13]. These morphological and functional changes in the masticatory apparatus significantly complicate chewing food and reduce the effectiveness of prosthetics [2]. Resorption of the residual alveolar process in edentulous patients is a chronic, progressive, irreversible process. It occurs most intensively in the first 5 months after tooth extraction, then the resorption of the alveolar process is practically unlimited. Although it is quite difficult to predict the level of resorption in each patient, it is known that anatomical, biological, mechanical factors are involved in this process [3]. that the resorption of the alveolar process when using partial dentures is 1/8 of the level of resorption when using complete dentures [6]. atrophy of the upper and lower jaws occurs unevenly [4]. With the loss of teeth, atrophy of the bones of the jaws occurs both in the vertical and in the horizontal directions. Moreover, the upper jaw atrophies centripetally (in the vestibular-oral direction), and the lower jaw - in the centrifugal, that is, in the opposite direction. In this regard, not only the distance between the tops of the alveolar processes increases, but also an additional unfilled volume appears on the vestibular side in the upper

jaw and on the lingual side in the lower jaw. To this should be added the uneven nature of the atrophy of the alveolar processes. To create conditions for stable balance of removable dentures, only the location of the boundaries of the basis in the zone of muscle balance is not enough [7,9]. the middle of the alveolar process of the upper and lower jaws are of direct importance for the stabilization of complete removable dentures [7]. The importance of finding ways to solve the problem of the final saddle is obvious, since premature removal of abutment teeth due to loosening by support-retaining elements reaches 42% [11] Functional changes associated with the loss of teeth, causing microscopic and macroscopic restructuring of the jaw bones. As a result, the resorption process is accelerated, bone tissue atrophy occurs, namely, atrophy from inactivity [9]. Therefore, the issue of changing the alveolar processes, the degree of atrophy of which is an important factor in ensuring fixation of removable dentures, is given great attention [10].

The experience of using removable dentures shows that they not only restore the chewing function, but also create functional irritations in the alveolar processes, preventing the development of atrophy. In addition, they stimulate regenerative processes in the jaw bones and favorably affect the formation of the alveolar ridge [12]. Based on our observations, we can conclude that atrophic processes under removable prostheses in subordinate tissues occur continuously and are uneven. However, it should be emphasized that the duration of full-fledged use of complete dentures can be increased if the application of the technique for obtaining imprints includes features of the state of the mucosa, that is, its compliance [2]. Of particular importance for preventing complications is the preparation of the prosthetic bed before prosthetics, including surgical alignment. ridges, which ensures the success of fixing the prosthesis and preventing prosthetic inflammation. Specialized therapeutic and prophylactic methods are aimed at neutralizing the side effects of the basis of the

prosthesis, and correcting the main pathogenic factors [12]. Plastic dentures in the oral cavity experience significant functional loads. Therefore, the materials for their manufacture must have high physical and mechanical properties [11]. The operation of products from basic acrylic plastics occurs in the oral environment with the constant action of oral fluid, food debris, microorganisms and their metabolic products, various loads [1]. There is an interdependence between the type of overload on removable lamellar dentures, the strength of the basis of the prosthesis, the structure and mechanism of its destruction.

After the complete loss of teeth, the dentition is subject to involitional processes, leading to significant functional and morphological changes. The anatomical shape and topographic relationship of the soft and hard tissues of the face change. There are changes in the temporomandibular joint [3, 4]. The quality of prosthetics is determined not only by the state of the tissues of the prosthetic bed, it largely depends on the sequence and content of clinical and laboratory manipulations, the properties of the materials used, and the psychological preparedness of the patient [11].

Analyzing the scientific achievements of the use of removable dentures and their shortcomings, it can be noted that the data clearly indicate the feasibility of carrying out preventive measures. Summarizing the measures taken to prevent complications, they can be divided into two groups: general preventive action and special therapeutic and preventive measures. General preventive actions include the preparation of a prosthetic bed, the use of a prosthesis base made of a material that is indifferent to the tissues of the oral cavity, and the hygiene of dentures. Special therapeutic and preventive measures include reducing the direct contact of the base of the prosthesis with the mucosa. In these cases, various means are used, in particular, shielding of the base of the prosthesis, special hygienic substances for the care of prostheses, septic mouth rinses, a number of insulating pads and increasing the body's defenses through the use of adaptogenic drugs.

#### References:

1. Andreev V.V. sposob izgotovleniya zubnykh protezov s chetkim prileganiem k proteznomu polyu plastmassovym bazisom /V.V. Andreev//Stomatologiya. – 1980. – №3. – S.61-62.
2. Bosa L. F. Atroficheskie izmeneniya v al'veolyarnykh otrostkakh verkhnei chelyusti pod vliyaniem polnykh s"emnykh protezov / L. F. Bosa, O. I.

Teslenko, O. B. Belikov// Ukrainskii stomatologicheskii al'manakh.- 2002.- № 6. – S.14-16.

3. Vosstanovlenie polnoi poteri zubov /[Vares E.Ya., Kalinina N.V., Zagorskii V.A., Semenova O.A.]. – Donetsk, 1993. – 240 s.

4. Vasilenko V.M. Fazy adaptatsii zhevatel'nogo apparata k s"emnym zubnym protezam Klinikomorfologicheskoe obosnovanie / Vasilenko V.M.,Zinov'eva P.I., Korzh V.I. //Aktual'nye voprosy stomatologii: sb. nauchn. tr. Samar. med. in-ta im.D.I. Ul'yanova; pod red. I.M. Fedyaeva. - Samara,1992. – S.52-54.

5. Gavrilov E.I. Protez i proteznoe pole/E.I. Gavrilov. – M.: Meditsina, 1979. – 112 s.

6. Gavrilov E.I. Teoriya i klinika protezirovaniya chastnymi s"emnymi protezami / E.I. Gavrilov– M.: Meditsina, 1973. – S. 175-203.

7. Gavrilov E.I. Ortopedicheskaya stomatologiya E.I. Gavrilov, A.C. Shcherbakov. – M.: Meditsina,1984. – S. 202-278.

8. Devder A.I. Analiticheskii obzor faktorov i profilakticheskikh meropriyatii vospalitel'no-reaktivnykh izmenenii tkanei proteznogo lozha pri pol'zovanii zubnymi plastinchatymi akrilovymi protezami / O.I. Devdera// Ukrainskii stomatologicheskii al'manakh.-2008.- №5.- S.20-23.

9. Doinikov A.I. Izmenenie makroskopicheskogo i mikroskopicheskogo stroeniya chelyustnykh kostei v svyazi s vozrastom i utratoi zubov. Vliyanie zubnogo protezirovaniya (kliniko-eksperimental'naya chast'): avtoref. dis. na soiskanie nauch.stepeni kand. med. nauk: spets. 14.01.22 «Stomatologiya»/A.I. Doinikov. – Poltava, 1967. – 19 s.

10. Doinikov A.I. Zubotekhnicheskoe materialovedenie/A.I. Doinikov, V.D. Sinityn. – M.: Meditsina,1986. – 208 s.

11. Dragobetskii M.K. Rol' psikhosomaticeskikh rasstroistv v geneze psikhogennoi neperenosimosti s"emnykh zubnykh protezov / M.K. Dragobetskii //Stomatologiya. – 1988. – № 5. – S. 89-92.

12. Emel'yanov A.N. Klinicheskaya kartina i protezirovaniye bol'nykh s kontsevyimi iz"yanami ryadov: avtoref. dis. na soiskanie nauch. Stepeni kand. med. nauk: spets. 14.01.22 "Stomatologiya" / A.N. Emel'yanov. – Kalinin, 1989. – 16 s.

13. Esenova Z.S. Znachenie kolichestva i mesta raspolzheniya klammerov v s"emnom plastinochnom proteze i vliyanie ikh na parodont opornykh zubov: diss. ... kand. med. nauk/Z.S. Esenova. – M., 1966.– S.34.