The Role of Prosthetics in The Treatment of Diseases of The Maxillofacial Region

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ABSTRACT

Reasons for the high need for orthopedic treatment with removable dentures, the leading position is still occupied by " insufficient sanitation of the oral cavity, untimely access of patients to the dentist." In addition, an important role is played by the problem of imperfection of materials and technologies used for the manufacture of dentures, leading to deterioration of the dental system [1.3.5.7.9]. Time lag is a sliding body that undergoes the process of crushing chains and crushing food blocks, in other colas it is a multi-layered galaxy that grinds its teeth with anger and rage. NPZHB - complex and coordinated, according to the description of movements, the hinges are locking [1.3.5].

Keywords: Jaw Exhibits, Teeth

The relevance of the topic.

Reasons for the high need for orthopedic treatment with removable dentures, the leading position is still occupied by " insufficient sanitation of the oral cavity, untimely access of patients to the dentist." In addition, an important role is played by the problem of imperfection of materials and technologies used for the manufacture of dentures, leading to deterioration of the dental system [1.3.5.7.9]. Time lag is a sliding body that undergoes the process of crushing chains and crushing food blocks, in other colas it is a multi-layered galaxy that grinds its teeth with anger and rage. NPZHB - complex and coordinated, according to the description of movements, the hinges are locking [1.3.5].

Other authors [2.4.6.8] believe that the superficial area of the flange of the Chin lower jaw exhibits a saddle joint, the surface of which is similar to the surface of the wrist-toe core joints of the big toe. From a biomechanical point of view, the junction of the lower jaw (p / j) with the skull consists of four synergistic moving joints, so some authors propose to call the CHIN LOWER JAW "Chin lower jawcomplex". According to the author (Yu. Simanovskoy) [7.9.10], Chin lower jaw is a complex musculoskeletal carcass with many components, involved in the connection of the upper jaw (y / j) and the rows of teeth of the p / j, providing the movement of the p / j in different directions. block. Motions are an example of motion around instantaneous and variable axes, which is a condition in biomechanics. The authors (O.G. Bugrovetskaya and Hammual [11.13.15.16] divide the network of types of motion around different axes as follows; a horizontal arrow involved in the opening and closing of the mouth and between the arrows; slip planes lying at the level of the p / j tongue and varying in p / j protrusion and retrusion; a side-sliding bullet at the end of the bullet; the whole p / j slides and moves laterally; axis of rotation around the vertical, located in the center of the right or left joint; a curved axis located at the center of one or the other joint for the combined movements of deviation and opening of the mouth [17.18.19.21.23].

The authors emphasize that the activity of TJT is related to the structure of its blocks, the suction activity should end in the eighteenth month of

the period of postnatal ontogeny. Defects of dental arches and occlusion disorders were observed if suction was continued later; i.e., disorders in jaw articulation, morphological changes of joint heads, followed by deep structural changes in the upper jaw (yu / j), hard palate, temporal bone [20.22.24.26.28.32]. These changes, in turn, adversely affect hemocirculation, hearing, respiration, and impaired chewing and facial muscle function in the cranial cavity. Studies have not been sufficiently studied in terms of human masticatory muscles and the force factors that produce CHIN LOWER JAW: One author suggests that Chin lower jaw is not formed at all, while another suggests that it produces several hundred Newtonian reactions. The displacement of the p / j from the central occlusion to the anterior part is accomplished by the right and left lateral wing muscles, directed by the incisors, and the displacement of the p / j in the horizontal plane is manifested in the form of a "gothic angle; when the p / j moves laterally from the central occlusion (MO) position, the Bennett motion is observed to rotate around the vertical axis in the p / j groove on the laterotrusive side of the convex growth; The authors emphasize that the shape mechanism of p / j in the form of a spatial frame, i.e. it can rotate freely around the hinge axis until some restriction is formed [23.25.27.29.30.31].

The current methods. There are many scientific and practical works around the world devoted to the local and systemic sensitivity of the body to dentures made of various types of plastics.The results of the conducted studies confirm that when using removable dentures made of acrylic polymers, changes of various nature are often observed in the tissues of the prosthetic bed and the oral mucosa, and the most common of them are inflammatory and dystrophic, associated with mechanical and toxic-allergic effects of the prosthesis base material. However, the quality of removable prostheses largely depends on the manufactured material. Therefore, special interest is paid to improving the biocompatibility and physico-chemical properties of prostheses [2.4.6.8].

The complexity of processing dentures made of thermoplastic polymer, leading to a rapid loss of aesthetic characteristics of the denture, its contamination with microorganisms that contribute to diseases of the oral mucosa, the emerging dissatisfaction of patients with the altered appearance of the removable prosthesis. (Dmitrienko S.V., 2013; Danilina T.F., 2013; Mikhalchenko D.V., 2013; Irsaliev H.And, Nigmatov R.N., Khabilov H.L., 2011; Lee S.J., 2008).

Injection molding technology of thermoplastic polymers is considered as a promising technology in modern dentistry to achieve high aesthetic standards (Tregubov I.D., 2007;. Ryzhova I.P., 2012;. Skorikova L.A., 2014;.Badewa A.P, 2002; Gucht D.E., 2013).

This technology is of interest not only among specialists, but also among patients. A common characteristic of this group of materials is the absence of a residual monomer, and, consequently, their bioinertness for the body. The constructions of them are characterized by elasticity; lightness, comfort and high aesthetics (. Vares E.Ya, 2004; Konnov V.V., 2010; Fujii T.A., 2005).

Traditional technical approaches and well-known polishing agents used in dentistry for basic polymers leave traces, micro-scratches, do not allow to achieve a smooth, even and shiny surface of a dental prosthesis made of thermoplastic polymers [1.7.9.11]. The final processing of dental prostheses made of thermoplastic polymers today requires a lot of time and effort from specialists and often leaves dissatisfaction with the quality of the surface obtained [10.11].

The purpose of the study.

To determine the features of prosthetics with removable dentures and to develop criteria for the selection of materials for removable dentures with end defects.

Objectives

a special questionnaire system has been developed for patients with various types of

removable dentures with partial absence of teeth.

a method for determining the hygienic condition of the surface of dentures made of various materials has been developed.

A description of the literature reflecting the approach of world scientists to solving this problem is presented. We studied the need for orthopedic treatment with removable dentures in the partial absence of teeth, the effect of removable dentures on the prosthetic bed, the pliability of the mucous membrane of the prosthetic bed, factors affecting changes in the tissues of the prosthetic bed when: using removable dentures.

All the subjects were divided into three groups.

1-the group where the Quadrotti prosthesis made of thermoplastic material was used. (n=34)

2-group where patients had dentures made of acrylic polymer "Fluorax" (n=33)

Control group-healthy people (n=16)

Based on medical and social research, a special questionnaire was developed for patients in order to determine the clinical condition of the prosthesis, which is carried out using a questionnaire

With the help of the questionnaire, such data were revealed as previously used prostheses, the attitude of hygienic care to the prosthesis, the use of hygiene products, Your satisfaction with the prosthesis, whether you used professional cleaning of prostheses, the use of hygienic procedures, the timing of the comfortable use of the removable prosthesis.

The consists in dividing the surface of a removable denture into frontal and lateral segments, the boundaries of which are a line drawn through the middle of the canines on the denture, staining with a solution of methylene blue, rinsing with water for 5 seconds and drying with an air jet for 10 seconds, assessing the hygienic condition of the prostheses by staining the segments. At the same time, the surface of the removable denture is divided into the following segments: 1 and 2 segments – the area of the frontal teeth, 3 and 4 segments - the area of the chewing teeth, the assessment of the hygienic condition of the prostheses is carried out according to the following criteria: 1 degree - staining of 1 segment - a satisfactory level of hygiene, 2 degree - staining of 2-3 segments - an average level of hygiene, 3 degree - staining of 1, 2, 3, 4 segments - an unsatisfactory level of hygiene, 4 degree- staining of the entire surface of removable dentures facing the oral mucosa – critical level of hygiene. Depending on the degree of staining of the surface of the prosthesis, patients were given appropriate recommendations.

The condition of the mucous membrane of the cavity was assessed by its color, moisture content, degree of compliance. The fact of the influence of removable denture structures can be expressed in the manifestation of pathological changes. For their presence and evaluation, the classification of prosthetic stomatitis proposed by A.K. Iordanishvili (2007) was used. The inflammatory reaction of the mucous membrane was detected using the technique proposed by E.S. Kalivrajian (2003).

At the stages of dynamic observation, to identify inflammatory areas of the mucous membrane, the inner surface of the prosthesis was covered with an emulsion-a solution of zinc oxide, a solution of aqueous polyvinyl alcohol and food starch, in a ratio of 1:1:4:3. The surface was dried. After that, the Schiller-PISAREV composition was used on the mucous membrane of the prosthetic bed and a minute later the fixation of the emulsified prosthesis into the oral cavity was carried out. For several seconds, the patient imitated chewing movements. Then the prosthesis was removed from the oral cavity. The iodine included in the composition reacted with starch. The intensity of the base coloring in blue color, topographically displayed areas of inflammation of the oral mucosa. At the heart of the staining process is edema, as a manifestation of the inflammatory process in soft tissues. The assessment was carried out subjectively by color: the more intense the color, the higher the intensity of the inflammatory reaction of the mucous membrane. Quantitative measurement of the area of the mucosal load zones was carried out using the application of a polyethylene film with a millimeter division into a outlined fragment of the oral mucosa. Consequently, the transfer of the inflammation zone was further scanned in the computer program

"histogram", the area was calculated. The indicators of the inflammatory response of patients of the selected groups were summed up. In the future, they were analyzed in a comparative aspect between clinical groups. The dynamics of the state of the oral mucosa was checked after 3.14 days, 1,3,6 months of patient observation.

A device (pH meter) was used to determine the pH of the oral fluid with special vacuum electrodes with a flat working surface, which provided a rigid connection between the measuring electrode and the reference electrode. The device as part of the pH meter-millivoltmeter model "pH-121", has a low thermal inertia and allows you to get the result in a few seconds.

Microbiological studies were conducted in the groups of patients studied by us before and after prosthetics.

To do this, patients were offered to rinse their mouths with distilled water 2 hours after eating, then the oral fluid was collected in sterile dishes, and subsequently the surface of differential diagnostic nutrient media was seeded with a certain volume of them. Cultivation of crops for the isolation of anaerobic microbes was carried out by the method of sealed polyethylene bags filled with mainline natural gas. Identification and differentiation of cultured microorganisms was carried out using Bergy's Manual Systematic Bacteriology (1997)

To determine the phagocytic activity of neutrophils in saliva, sampling and processing of the material were carried out according to the method of Temurbaev M.A. (1984), modified by Antonov A.V. (1996). The activity of lysozyme in saliva was determined by us using the method of Aliyev Sh.R. (1994) (1 The method for determining immunoglobulins of class A – secretory fraction (sIgA) is based on the Mancini method (1964).

Statistical studies were conducted on the basis of standard clinical recommendations. The results of the clinical examination were processed on a Pentium-IV personal computer using Microsoft Exell office applications and the STATPLUS biostatistics program (2009), with the calculation of the arithmetic mean of the studied indicator (M), its standard error (m), reliability indicators (P) and the Student's criterion.

The obtained data on the index of cleanliness of prostheses in 100% of patients of all groups, throughout the entire period of use, it can be argued that the worst result was not revealed - a "very poor level of hygiene" corresponding to 5.0-5.5 points. In patients of the main group 1, after a month, the condition of removable prosthesis structures is at the level of "satisfactory" in 5 people (31.3%), and at the level of good-11 people (68.7%). There are no bad results.

In patients of group 1, after a month, the condition of removable prosthesis structures is at the level of "satisfactory" already in 8 people (50%), and at the level of good - only in 4 people (25%). There is also a bad condition in 4 people (25%).

After 3 months, the results of the survey showed that all 49 patients noted the constant, convenient use of prostheses. Everyone expressed their satisfaction with the aesthetic properties of their designs. During the survey, it was revealed that all the survey participants carefully followed the recommendations and carefully monitored the oral cavity and prostheses. The professional assessment of the hygienic condition worsened after 6 months in the 2nd observation group.

Conclusion.

The best results were determined in group 1 in people using Quadrotti prostheses. The average results were in group 2 in individuals who had rigid dentures made using classical technology. As a result of the study of the condition of the mucous membrane, the presence of an inflammatory reaction in the form of foci with color of different intensity was revealed in all groups of patients. Analysis of the obtained macrohistochemical data indicates that the highest average values of the inflammatory reaction are observed in the first week after the application of removable prosthesis structures. Moreover, the reaction of the mucous membrane depends on the properties of the basis and is more pronounced under the influence of rigid structures, compared with thermoplastic prostheses. In patients of the second group using rigid prostheses, the foci of the inflammatory reaction were the largest, and their average value was -314.8 ± 0.03 mm.

References.

1. Saidov A.A. Assessment of some indicators of oral liquid in children with the pathology of the temior-lower under

jaw joint // Asian Journal of Multidimensional Research , Indiya, 2020.Vol 9, Issue 1, january. – P. 59-63. Impact Faktor= 6.8

2. Saidov A.A. Hygienic condition of the oral cavity during orthodontic treatment of children with temporomandibular joint dysfunction // The Pharma Innovation Journal. Indiya, 2020. - № 9(6). - P. 589-591. Impact Faktor= 5.98

3. Gaffarov S.A., Saidov A.A. The importance of matrix metalloproteases in the pathology of the tempo-mandibular joint in children // International Journal on Integrated Education, Indonesia, 2020. Volume 3, Issue V, May. - P. 65-68. Impact Faktor= 5.083
4. Saidov A.A., Olimov S.SH., Gaffarov S.A., Akhmadaliev N.N. The value of matrix metalloproteases and connective tissue markers in the pathology of temp-jaw joint in children // Journal of critical reviews, 2020. Vol 7, – P. 44-49.
5. Mirsalikhova F. L., Eronov Yo. K., Radjabov A. A. Prevention and treatment of caries in children with cerebral palsy// ACADEMICIA: An International Multidisciplinary Research Journal Vol. 9 Issue 12, December. - 2019. – P. 68-70.
6. Eronov Yo.Q., Rajabov A.A. Assessment of the evaluation of oral hygiene in children with cerebral palsy// Asian Journal of Multidimensional Research (AJMR) February. - 2020. – P. 189-191.
7. Eronov Yo.Q., Rajabov A.A. Analytical indicator of saliva in children with cerebral palsy// ACADEMICIA: An International Multidisciplinary Research Journal. - 2020. – P. 1823-1825.
8. Eronov Y.Q., Rajabov A.A. Loshli-Yushenko-Krasnagorskiy method of leave in children with brain palacy// The Pharma Innovation Journal. - 2020. – P. 601-602.
9. Саидов А.А., Азимова Ш.Ш, Абруев У.Р.Тиш-жағ тизими аномалиялари ва деформацияларининг Бухоро шахар мактаб ёшидаги болалар орасида тарқалиш даражасини ўрганиш // Доктор Ахборотномаси. Илмий-амалий журнал №1 30.03.2020 й. – Б. 67-71.
10. Саидов А.А., Азимова Ш.Ш., Ахмедов Х.К. Тишлов аномалиялари ва чакка пастки жағ бўғими дисфункцияси бўлган болалар оғиз бўшлиғи гигиеник ҳолатини баҳолаш // Доктор Ахборотномаси. Илмий-амалий журнал №3 30.09.2020 й. – Б. 70-73.
11. Ибрагимова Ф.И., Азимова Ш.Ш. Таълим жараёнларида Аксиоматик ёндашувлар (Тезис) // Состояние медицинского образования, проблемы и перспективы - 12.05.2020. – С. 36-37.
12. Saidov A.A., Azimova Sh.Sh. To study the prevalence of anomalies and deformations of the dental system among school-age children in Bukhara (Тезис) // International Journal of Innovations in Engineering Research and Technology 14.08.2020. – P. 28-29.
13. Саидов А.А., Азимова Ш.Ш. Определение основных этиологических факторов у детей с дисфункцией височно-нижнечелюстного сустава (Тезис) // Monografiya Pokonferencyjna Science, Research, development #32. Berlin. 30.08-31.08.2020. – P. 48-51.
14. Sh.Sh.Azimova., A.A.Saidov., F.I.Ibragimov Medical and Psychological Approach in the Early Diagnosis and Treatment of Cutaneous Bite in Children Ilocua Annals of R.S.C.B..ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 16137 - 16142 Received 05 March 2021; Accepted 01 April 2021.16137 hltp : //annal sofrscb.ro
15. Mirsalikhova F. L. Upgraded approach and methods of use of modern theory comprehensive prevention programs dental caries in children.// «European science review». № 9-10 September-October Vienna 2016, 110- 112 p
16. Mirsalikhova F. L. The importance of biophysical properties and mineralizing function of salives in children during cutting of constant teeth period .//

International Conference Science, Research, development Philology, Sociology and culturology Berlin 30-31.05.2018.165-168p
17. Mirsalikhova F. L. Efficiency of the micropreperation method in treatment of children caries .// Scientific researches for development future: medicine and natural science San Francisco, USA 15may, 2018. 21-23p
18. Олимов С.Ш., С.А.Ғаффоров., Н.Н. Ахмадалиев. Взаимосвязь между аномалиями зубочелюстной системы и соматических заболеваний у детей.// «Назарий ва клиник тиббиёт журнали» №2. Тошкент-2016. 74-77 б.
19. Олимов С.Ш., Immune disorders of dentoalveolar anomalies in schoolchildren.// British Journal of advances in medicine and medical research 30(3):,Лондон-2019; 1-5.
20. Олимов С.Ш., Saidov A.A. Gafforov S.A. Akhmadaliev N.N., Assessment of hepatobiliary system with dentoalveolar anomalies in schoolchildren.// International journal of research volume 06 issue 03 576-583 March. 2019 USA.
21. Олимов С.Ш., Saidov A.A, Gafforov S.A, Akhmadaliev N.N. Бухоро вилояти мактаб ўқувчиларида аралаш сўлакнинг элемент таркиби тавсифи.// Journal of biomedicine and practice №4 Тошкент 2019 64-70 бет.
22. Олимов С.Ш., ГаффоровС.А. Болаларда тиш-жағ тизими нуқсонлари ва соматик касалликлар орасида богликликнинг илмий асослари. (адабиётлар шарҳи).// Журнал. Stomatologiya. 1-2019й 60-65 бет.
23. Олимов С.Ш., Саидов А.А., Гаффаров С.А. Ахмадалиев Н.Н. Значение матриксных металлопротеаз при патологии височно-нижнечелюстного сустава у детей.// Мед. Журнал Узбекистана3-2019 й 32-35 бет.
24. Олимов С.Ш., Саидов А.А. Гаффаров С.А., Оценка некоторых показателей ротовой жидкости у детей с патологией височно-нижнечелюстного сустава.// Вестник ТМА 4-2019й 119-122 бет.
25. Олимов С.Ш., Саидов А.А., Гаффаров С.А. Оценка маркеров соединительной ткани в развитии патологии височно-нижнечелюстного сустава у детей.// MEDICUS Международный медицинскый журнал, №3(27),2019г. 44-46ст.
26. Олимов С.Ш., Саидов А.А., Гаффаров С.А. Кичик мактаб ёшидаги болаларда тиш-жағ аномалияларининг тарқалганлик даражаси (ретроспектив маълумотлар).// Журнал Тиббиётда янги кун.2/26 Бухара 2019.286-288 бет.
27. Nurov N.B., Teshaev SH.J., Morphometric parameters of the craniofacial area of elderly people with partial and complete adentia. // International journal on human computing studies. Volume: 02 Issue: 6 November-December 2020. С.25-2717.
28. Nurova Sh.N. Etiology, diagnosis, treatment and prevention of Dental deformities inchildren associated with Otorhinolaryngological diseases. World Journal of Pharmaceutical Research SJIF impact Factor 8.084ISSN 2277– 7105 Volume 9, Issue 6, 267-277.
29. Nurova Sh.N., Gaffarov S. A. Maxillofacial anomalies in children with chronic tonsillitis and immunity factors, hypoxia and endogenous intoxication for the development and formation of pathology. «International Journal of Pharmaceutical Research» September 2019 Vol 11 Issue3. С.1018-1026
30. Saidov A.A. Assessment of some indicators of oral liquid in children with the pathology of the temior-lower under jaw joint // Asian Journal of Multidimensional Research , Indiya, 2020.Vol 9, Issue 1, january. – P. 59-63. Impact Faktor= 6.8 31.Saidov A.A. Hygienic condition of the oral cavity during orthodontic treatment of children with temporomandibular joint dysfunction // The Pharma Innovation

Journal. Indiya, 2020. - № 9(6). - P. 589-591. Impact Faktor= 5.98

31. Saidov A.A., Olimov S.SH., Gaffarov S.A., Akhmadaliev N.N. The value of matrix metalloproteases and connective tissue markers in the pathology of temp-jaw joint in children // Journal of critical reviews, 2020. Vol 7, – P. 44-49.