



COMPLICATIONS OF PROSTHETICS WITH CLASP PROSTHESES WITH LOCK FASTENERS

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A B S T R A C T	K E Y W O R D S
<p>The development of alternative dental services allowed patients to choose between public dental care and private clinics. Many patients suffer from partial tooth loss at a relatively young age. Restoration of various defects with clasp and microprostheses using lock fasteners is one of the alternatives to standard treatment. At the same time, the use of fixed and removable dentures with lock fasteners of modern manufacturers requires the training of doctors and dental technicians, the availability of appropriate equipment for precision casting in foundry laboratories, compliance with manufacturing technology and the correct choice of the type of lock fastening in accordance with the features of the defect of the dentition. The practical use of lock fasteners during dental treatment is associated with a sufficient number of complications caused by medical errors. So, in the domestic literature there is only one message about errors in prosthetics of teeth using lock fasteners. Particular issues related to improving the quality of the therapeutic and diagnostic process in orthopedic dentistry were also considered. The analysis of domestic and foreign literature shows that currently in the practice of orthopedic dentistry there is no unified and formulated classification of errors and complications in prosthetics with the use of lock fasteners (attachments). There is also no documentation on all stages of orthopedic treatment using this type of composite structures. In addition, as practice shows, there is a problem of conflict situations in orthopedic dentistry during prosthetics using lock fasteners, the problem of clinical and professional assessment of medical errors and complications has not been studied, algorithms for their solution have not been developed. Therefore, an attempt was made to study the causes of medical errors and complications in orthopedic treatment using lock fasteners in patients with partial absence of teeth and, based on the results obtained, to increase the effectiveness of orthopedic treatment. Along with this, the influence of medical and legal literacy of orthopedic dentists on the resolution of conflict situations in the provision of this type of treatment was studied.</p>	

Introduction

Research methods: In order to study errors and complications at the clinical stage of manufacturing and application of lock fasteners in orthodontics and microprosthetics in dental clinics of the Samarkand region, a study of patients with partially lost teeth has been conducted for several years. Of the total number of examined patients, 150 had complications associated with defects in prostheses with lock fasteners. During the examination of the oral cavity and the analysis of defects, medical errors were revealed in various parts of the prosthesis, depending on the clinical stage of prosthetics. For this purpose, 100 prostheses were made using various types of attachments. In addition, 50 microprostheses with lock fasteners were manufactured. To determine the location of stationary teeth and the aluminum system, 600 people (350 men and 250 women) were allocated with the help of endodontic descents of class I and II according to Kendi at the age of 25 to 75 years. Bilateral endodontic defects were present in 416 cases; out of 600 patients, 305 were previously equipped with prostheses with clamp and lock fixation. The reasons for replacement of prostheses were pain under the basis of the prosthesis, discomfort, poor fixation, unaccustomed to the prosthesis and various complications when wearing clasp prostheses with clamp fixation. The remaining 295 patients have never used removable prostheses. 405 people (181 men and 224 women) aged 20 to 65 years with defects of the dentition of the II and III Kennedy class were also interviewed. Defects included 230 maxillary and 175 mandibular cases. Of the 405 patients observed, 168 had previously been fitted with metal bridges, immediate prostheses or micro-prostheses on attachments. The reasons for the replacement of the prosthesis were pain under the metal bridge due to the large gap between the teeth of the abutment, a fracture of the bridge, an unpleasant smell from under the crown of the abutment, pain under the basis of an immediate prosthesis and various complications when wearing an attachment microprosthesis. The remaining 227 patients had not previously received orthopedic treatment. According to our study, the causes of partial tooth loss were caries and its complications, visceral diseases - 52% of patients, mechanical injuries of various types - 12% of patients, periodontal diseases - 40% of patients. The clinical experience of using 195 orthodontic devices with 384 locking fasteners for prosthetics of distal and unlimited defects of the dentition and 88 microprostheses with 94 locking fasteners for prosthetics of inclusive and unilateral marginal defects of the dentition showed that the main patterns in the state of the ligamentous apparatus of the periodontal, teeth and the prosthesis itself, depending on the type of locking fastening, were the main patterns.

Clinical studies of intracanal lock fasteners have shown that the greatest number of errors and complications during manipulations with prostheses with various types of lock fasteners occurs when choosing the wrong type of orthopedic treatment and non-compliance with the prosthesis manufacturing technique. The study showed that the most common errors and complications occur when choosing the wrong type of orthopedic treatment and non-compliance with the technique of manufacturing prostheses. Clinical studies on patients have shown that errors and complications in orthopedic treatment occur for both objective and subjective reasons in the practice of specialists, especially in prosthetics with lock fasteners. Based on the analysis of the literature, the study of clinical errors in various parts of the prosthesis and our own observations, we have identified all possible variants of the most common errors and complications in prosthetics with lock clamps and grouped them into:

Errors in fixing the prosthesis:

1. errors in choosing the design of composite prostheses with fixators in the presence of inflammatory diseases of periodontal tissues, atrophy of the alveolar process, elasticity of the mucous membrane and mobility of the supporting tooth;

1.2 Errors related to incomplete treatment of chronic inflammation of the supporting root (endodontic errors);

1.3 Perforation of the root wall, trauma to the bottom of the fossa and bifurcation of the supporting tooth (endodontic errors);

1.4 Insufficient filling of the root canal of the supporting tooth (endodontic error) 1.5;

1.5. error in preparing the root for a stamped tab;

1.6. perforation of the root wall of the supporting tooth under the tab;

1.7. lack of X-ray inspection;

1.8. damage to the marginal gum;

1.9. errors during restoration in the partial absence of subgingival tissues;

1.10. damage and mechanical injury of the supporting tooth (overheating of the tooth);

1.11. mechanical damage to adjacent teeth;

1.12. violations of mixing and sealing of cement in the root cavity under the tab and inside the crown;

1.13. Absence of protrusions under the protrusions and supporting crowns;

1.14. excessive gaps between the inner surface of the supporting crown and the stump of the tooth;

1.15. poor manufacturing quality of support crowns;

1.16. damage to the patrice of the lock fasteners;

1.17. the use of a large number of locking fasteners with a small number of supports;

1.18. failure of the matrix ball during the service life of the prosthesis (improper processing, defects in the casting of the ball neck, locks are not made);

Errors in the ratio of removable and non-removable parts of a composite prosthesis:

2.1; the choice of designs using lock fasteners due to defects in the dentition.

Incorrect use of locks;

2.4. errors in determining the stiffness of the matrix and the matrix of the lock fastening;

2.5. errors in processing the socket of the lock fastening matrix;

2.6. formation of a space between the removable part and the mucous membrane;

2.7. defects in the manufacture of interlock;

2.8. matrix defects

2.9. lack of interaction between the lock matrix;

2.9. incorrect choice of the size of the clasp fastening;

2.10. incorrect choice of the type of lock fastening;

2.11. lack of parallelism of the lock fastening of the clasp;

2.12. lack of space for the patient's fingers when removing the prosthesis

Absence of a convenient place for grabbing in the prosthesis; errors in the manufacture of the removable part of the composite prosthesis:

3.2. errors in the manufacture of the prosthesis frame;

3.3. saddle-shaped part of the frame, translucent through the base of the prosthesis;

3.3. the space between the removable part and the mucous membrane;

3.4. errors in the manufacture of the matrix socket;

- 3.5. poor fixation of the prosthesis;
- 3.6. errors in the re-manufacture of the removable part of the composite prosthesis;
- 3.7. allergic reaction;
- 3.8. the mucous membrane of the oral cavity.
- 3.9. injury or toxic damage;
- 3.9. insufficient space for the prosthesis to cover the matrix socket of the frame of the clasp prosthesis;
- 3.10. lack of tight contact of the closing shoulders of the clasp prosthesis;
- 3.11. errors in the restoration of central occlusion using the clasp prosthesis.

From the above data, it can be concluded that there is an insufficient level of professional skills, a decrease in the importance of accurate and timely maintenance of medical documentation, insufficient control over the practical activities of dentists by persons responsible for the structure and management of dental institutions. However, this indicator is not the result of the successful work of dentists. This is due to the fact that over the past decade, the management of dental clinics of the republic has analyzed 273 complaints from patients about improper provision of dental orthopedic care to the population. The analysis showed that the complaints were divided into two main groups: complaints about the organizational work of the dental clinic and complaints about the poor quality of dental care. It should be noted that during the same period, complaints about the organizational work of dental institutions accounted for 61% of the total number of complaints. This is due to changes in legislation in the field of healthcare in connection with the development of market relations, the introduction by dentists and orthopedic surgeons of modern methods of prosthetics of partial dental defects using lock fasteners, as well as with the improvement of legal literacy of patients. Most of the applicants were women . At the same time, 80% were urban residents and 24% were rural. At the same time, the analysis showed that the number of written complaints filed by patients was related to the quality of treatment and service and was distributed by age groups: women aged 40 to 67 years, men aged 50 to 68 years. 120 (44%) complaints were related to poor-quality orthopedic treatment, 95 (35%) complaints related to poor quality of service and non-compliance with ethical standards by medical personnel (doctors and nurses) in dental institutions. The remaining 50 complaints (19% of cases) were filed by citizens who received dental care in the orthopedic department. It is known that the quality of dental care to the population largely depends on the level of professional training and qualifications of specialists in this field. In this regard, orthopedic dentists should have sufficient knowledge about the details of the clinical application of the locking joint in biomechanics, which must be recorded in the patient's outpatient card (medical history and other medical documentation), with additional examination and diagnosis at the clinical stage. The results of a survey of orthopedic dentists show that 75% of specialist doctors use the latest methods and technologies of prosthetics in their work, but do not fully understand the subtleties of the locking connection in biomechanics. According to the survey, the majority of doctors (65%), discussing with patients preliminary plans for orthopedic treatment using locks, either refuse or get consent for additional X-ray examination of abutment teeth - a necessary condition for ensuring the quality of orthopedic treatment. Such examinations were recorded in outpatient records only in 13% of cases, and there were no records of the patient's consent or refusal to prosthetics using locks. 77% of specialists stated that they warn patients about possible errors or complications during orthopedic treatment using locks According to experts, the reasons for this are insufficient specialized qualifications of orthopedic doctors for such a complex type of prosthetics (36%), insufficient material and technical support during treatment (15%),

insufficient equipment (8%) and insufficient amount of time required for high-quality implementation of all stages of orthopedic treatment. Some respondents also indicated that these data are recorded in the patient's outpatient medical record. However, the results of the analysis turned out to be exactly the opposite. Not a single entry in the patient's outpatient card warned of possible errors or complications during treatment. At the same time, 70% of specialists indicated that they record all errors and complications that have arisen during orthopedic treatment using blocking fixators in the outpatient card. However, only 6% had such an entry in their patients' outpatient records. According to the survey, 90% of specialists carried out preventive examinations of their patients regarding the freedom of locking or modification of the sliding part of the composite prosthesis, but only 24% had such an entry in outpatient records. 63% of specialists noted that they use modern methods of orthopedic treatment in their practice, and 42% of respondents use modern materials and technologies of prosthetics, in particular composite structures with locking clamps.

Conclusion:

Thus, our study shows that the occurrence of errors in attachment prosthetics is associated with both insufficient qualifications of doctors and the lack of proper organizational and methodological work on the part of the management of healthcare institution

REFERENCES:

1. Astanovich A. D. A. et al. The State of Periodontal Tissues in Athletes Engaged in Cyclic Sports //Annals of the Romanian Society for Cell Biology. – 2021. – C. 235-241.
2. Astanovich A. A. Comparative Analysis of the Stress-Strain State of the Lower Jaw with Different Splinting Systems in Localized Periodontitis of Middle Gravity by Finite Element Modeling //Scholastic: Journal of Natural and Medical Education. – 2023. – T. 2. – №. 5. – C. 181-187.
3. Ortikova N., Rizaev J. THE PREVALENCE AND REASONS OF STOMATOPHOBIA IN CHILDREN //E-Conference Globe. – 2021. – C. 339-341.
4. Ахмедов А. А. Иммунологические аспекты патогенеза гингивита и пародонтита //IQRO. – 2023. – Т. 3. – №. 2. – С. 121-123.
5. Ортикова Н. POLITICAL ELITE AS A SCIENTIFIC PROBLEM //МЕЖДУНАРОДНЫЙ ЖУРНАЛ КОНЦЕНСУС. – 2021. – Т. 2. – №. 1.
6. Alimjanovich R. J., Khairullaevna O. N., Normuratovich N. A. CORRECTION OF PSYCHOLOGICAL STRESS IN CHILDREN WITH NON-PHARMACOLOGICAL METHODS OF DENTAL ADMISSION //Archive of Conferences. – 2021. – C. 108-114.
7. Xairullaevna O. N., Alimjanovich R. J. Improving the effectiveness of therapeutic and preventive measures by correcting psychoemotional stress in children at a dental appointment. – 2022.
8. Maxzuna U., Zarafruz B. IMPROVING THE PROVISION OF THERAPEUTIC DENTAL CARE TO PREGNANT WOMEN //Web of Scientist: International Scientific Research Journal. – 2022. – Т. 3. – №. 11. – С. 618-623.
9. Zarafruz B., Hekmat K. H. A. S. MANIFESTATION OF HERPETIC INFECTION IN THE ORAL CAVITY AND THEIR TIMELY ELIMINATION //Spectrum Journal of Innovation, Reforms and Development. – 2022. – Т. 10. – С. 47-52.

10. Qobilovna B. Z., Nodirovich E. A. EVALUATION OF ORTHOPEDIC TREATMENT WITH REMOVABLE DENTAL PROSTHESES FOR PATIENTS WITH PAIR PATHOLOGY //Spectrum Journal of Innovation, Reforms and Development. – 2023. – Т. 11. – С. 95-101.
11. Ruziyeva K. A., Burhonova Z. K. K. Complex Application Of Magnetic Laser Therapy And Propolis Tincture For The Prevention And Treatment Of Chronic Recurrent Aphthous Stomatitis //The American Journal of Medical Sciences and Pharmaceutical Research. – 2021. – Т. 3. – №. 06. – С. 127-130.
12. Абдуллаева Н. ИСКРИВЛЕНИЕ ШПЕЕ ПРИ ЗУБОАЛЬВЕОЛЯРНОМ УДЛИНЕНИЕ У ДЕТЕЙ С ВТОРИЧНЫМИ ДЕФОРМАЦИЯМИ ЗУБНОГО РЯДА //Collection of scientific papers «ΛΟΓΟΣ». – 2023. – №. May 26, 2023; Boston, USA. – С. 344-348.
13. Jamshed S. PREVALENCE OF PHYSIOLOGICAL BITE FORMS IN PEOPLE WITH DIFFERENT FACE TYPES //Web of Scientist: International Scientific Research Journal. – 2022. – Т. 3. – №. 11. – С. 451-454.
14. Makhmudova U. B. The Effectiveness Of The Use Of Parapulpal Pins (Ppp) When Restoring Defects In The Crown Part Of The Frontal Teeth //Asian journal of pharmaceutical and biological research. – 2022. – Т. 11. – №. 2.
15. Bakhtiyorovna M. U. Causes Of Removable Denture Breaks And Allergic Reactions //Spectrum Journal of Innovation, Reforms and Development. – 2022. – Т. 10. – С. 374-377.
16. Bustanovna I. N. Assessment Of Clinical And Morphological Changes In The Oral Organs And Tissues In Post-Menopause Women //Thematics Journal of Education. – 2022. – Т. 7. – №. 3..
17. Nizomitdin A. I. Therapeutic Effect Of Improved Enamel Surface Preparation Technique In The Treatment Of Acute Initial Caries Of Temporary Teeth In Children //Web of Scientist: International Scientific Research Journal. – 2022. – Т. 3. – №. 11. – С. 440-445.
18. Jamshed S. Prevalence Of Physiological Bite Forms In People With Different Face Types //Web of Scientist: International Scientific Research Journal. – 2022. – Т. 3. – №. 11. – С. 451-454.
19. Nazhmiddinovich S. N., Obloberdievich S. J. Optimization of Orthopedic Treatment of Dentition Defects in Patients with Chronic Diseases of the Gastrointestinal Tract //Eurasian Research Bulletin. – 2023. – Т. 17. – С. 157-159.
20. Ахмадов И. Н. КЛИНИЧЕСКИЕ ОСОБЕННОСТИ И ПРИНЦИПЫ ЛЕЧЕНИЯ АЛЛЕРГИЧЕСКОГО СТОМАТИТА ПРИ ИСПОЛЬЗОВАНИИ ЧАСТИЧНЫХ И ПОЛНЫХ СЪЕМНЫХ ПЛАСТИНОЧНЫХ ПРОТЕЗОВ //ББК 72 И66. – 2021. – С. 262.
21. Ахмадов И. Н. Нарушения в системе перекисного окисления липидов при парадантозе //IQRO. – 2023. – Т. 3. – №. 2. – С. 124-127.
22. Ахмадов И. ОБЗОР СРЕДСТВ ДЛЯ ФИКСАЦИИ ЗУБНЫХ ПРОТЕЗОВ //ЗБІРНИК НАУКОВИХ ПРАЦЬ НАУКОВО-ПРАКТИЧНА КОНФЕРЕНЦІЯ З МІЖНАРОДНОЮ УЧАСТЮ ТА НАВЧАЛЬНИМ ТРЕНІНГОМ З ОВОЛОДІННЯМ ПРАКТИЧНИМИ НАВИКАМИ «СУЧАСНІ МЕТОДИ ДІАГНОСТИКИ, ПРОФІЛАКТИКИ ТА ЛІКУВАННЯ ОСНОВНИХ СТОМАТОЛОГІЧНИХ ЗАХВОРЮВАНЬ». – 2021. – С. 43
23. Ikramova F. F. Ikramova Application of lymphotropic therapy for complicated forms of varicosis of the lower limbs: Application of lymphotropic therapy for complicated forms of varicosis of the lower limbs //Архив исследований. – 2021.

24. Shoxrux S., Shoxrux I., Faxriddin C. PREVENTION AND TREATMENT OF ORAL INFECTIONS IN DENTURE WEARERS //International Journal of Early Childhood Special Education. – 2022. – T. 14. – №. 4.
25. Fakhridin C., Shokhruh S., Nilufar I. ENDOKANAL PIN-KONSTRUKSIYALARNI ISHLATISHDA ASORATLAR VA XATOLAR TAHLILI //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2022. – T. 7. – №. 1.
26. Fakhridin C., Shokhruh S., Nilufar I. ENDOKANAL PIN-KONSTRUKSIYALARNI ISHLATISHDA ASORATLAR VA XATOLAR TAHLILI //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2022. – T. 7. – №. 1.