39. Сафаров М. и др. Влияние несъемных зубных протезов различной конструкции на микробиологические и иммунологические показатели полости рта //Stomatologiya. – 2014. – Т. 1. – №. 1 (55). – С. 18-23.

## ANALYSIS OF COMPLICATIONS ARISING DURING PROSTHETICS WITH FIXED CONSTRUCTIONS OF DENTAL PROSTHESES ON TWO-STAGE OSSEOINTEGRATED SCREW IMPLANTS, THEIR ELIMINATION, AND PREVENTION

*Safarov Murod Tashpulatovich, Ruzimbetov Hayot Bazorboyevich***.**
*Department of Hospital Orthopedic Dentistry,*
*Tashkent State Dental Institute*

Two-stage osseointegrated screw implants are widely used in modern prosthetics due to their high success rates and stability. However, complications during the prosthetic phase can compromise the outcome and patient satisfaction. This thesis analyzes the common complications encountered during prosthetics with fixed dental prostheses on two-stage screw implants, their causes, methods of elimination, and strategies for prevention.

1. **Common Complications During Prosthetics:**

o **Mechanical Complications:** These include screw loosening, fractures of implant components (abutment, screws), and issues with prosthetic fit. Inaccurate alignment or excessive occlusal forces can contribute to these problems.

o **Biological Complications:** Peri-implant soft tissue inflammation (peri-implant mucositis) and bone loss (peri-implantitis) are significant biological issues that may arise due to improper prosthetic design, bacterial colonization, or poor oral hygiene.

o **Aesthetic Complications:** Gingival recession, color mismatch, or improper positioning of the prosthetic crown can affect aesthetics, especially in the anterior region.

2. **Causes of Complications:**

o **Prosthetic Misfit:** Poor alignment of prosthetic components or inaccuracies in impression-taking can lead to improper fit, resulting in mechanical stress on the implant and surrounding tissues.

o **Excessive Occlusal Loading:** Overloading the implants due to poorly distributed bite forces or bruxism can cause mechanical failures and peri-implant bone loss.

o **Poor Soft Tissue Management:** Inadequate management of peri-implant soft tissues during the surgical or prosthetic phase can lead to gingival inflammation and mucosal recession.

3. **Methods of Elimination:**

o **Mechanical Adjustments:** Tightening or replacing loose screws, ensuring proper torque, and adjusting prosthetic fit through occlusal equilibration can resolve mechanical issues.

o **Biological Treatment:** Early diagnosis and treatment of peri-implant inflammation with professional cleaning, antimicrobial therapy, and in severe cases, surgical intervention are crucial for preventing further bone loss.

o **Aesthetic Corrections:** Soft tissue grafts, proper positioning of prosthetic components, and accurate color matching can improve aesthetic outcomes.

4. **Prevention Strategies:**

o **Accurate Treatment Planning:** Using digital tools such as CAD/CAM, intraoral scanners, and guided surgery ensures precise implant placement and optimal prosthetic fit, reducing mechanical complications.

o **Occlusal Management:** Implementing occlusal guards for patients with bruxism and adjusting bite forces during prosthetic placement can minimize excessive loading.

o **Soft Tissue Care:** Regular monitoring of peri-implant tissues, coupled with good patient education on oral hygiene, helps prevent biological complications such as peri-implantitis.

**Conclusion:**

Complications during prosthetics with fixed constructions on two-stage osseointegrated screw implants can be categorized into mechanical, biological, and aesthetic issues. Accurate treatment planning, proper occlusal management, and meticulous soft tissue care are essential in preventing these complications. Early detection and intervention are key to eliminating issues and ensuring the long-term success of implant-supported prosthetics.

**BIBLIOGRAPHICAL LIST**

1. Tashpulatova K. et al. Technique for eliminating traumatic occlusion in patients using Implant-supported bridges //European Journal of Molecular & Clinical Medicine. – 2020. – T. 7. – No. 2. – pp. 6189-6193.

2. Safarov MT, Ro'zimbetov XB, Tashpulatova KM, Safarova NT (2023). Tish Implantatlarida To'liq Yoyli Protezlarning Biomexanikasi. *Conferences* , 35–36. extracted from https://journals.scinnovations.uz/index.php/aposo/article/view/1030

3. Safarov, M., Akhmadjonov, M., & Ruzimbetov, A. (2022). Study of microbiological status in patients with perimplantitis in the area of bridges. *Conferences* , 138. retrieved from https://journals.scinnovations.uz/index.php/aposo/article/view/111

4. Tashpulatova K. M., Safarov M. T., & Ruzimbetov H. B. (2023). Hemodynamic Changes In The Mucous Membrane Of The Alveolar Ridge Of The Lower Jaw With Partial Defects Of The Dentition. EDUCATION, SCIENCE AND INNOVATION IDEAS IN THE WORLD, 34(4), 42–48. Retrieved from https :// www . newjournal . org / index . php /01/ article / view /9797

5. Safarov M.T., Tashpulatova K.M., & Ruzimbetov Kh.B. (2023). Analysis Of The Effectiveness Of Methods For Fixing Artificial Crowns And Bridges On Dental Implants. EDUCATION, SCIENCE AND INNOVATION IDEAS IN THE WORLD, 34(4), 36–38. Retrieved from https :// newjournal . org / index . php /01/ article / view /9795

6. Tashpulatova K.M., Safarov M.T., Sharipov S.S., Ruzimbetov H.B. (2023). Medium-term Forecast of the Efficiency of Fixed Dentures on Dental Implants. Conferences, 101–103. retrieved from http://journals.scinnovations.uz/index.php/aposo/article/view/1117

7. Safarov M.T., Shirinova Sh., Tashpulatova K.M., Ruzimbetov H.B. (2023). Adaptation of the Chewing Muscles in Patients with Prosthetic Bridges Fixed on

Dental Implants. Conferences, 93–95. retrieved from http://journals.scinnovations.uz/index.php/aposo/article/view/1113

8. Ruzimbetov Kh.B., Safarov M.T., Tashpulatova K.M. (2023). Microbiological Studies for Inflammatory Complications in the Peri-Implant Areas. Conferences , 79–82. retrieved from http :// journals . scinnovations . uz / index . php / aposo / article / view /1107

9. Safarov M.T., Tashpulatova K.M., Ruzimbetov H.B., Shakirova D. (2023). Clinical and X-ray Study of Changes in Hard Tissues Around the Implant in Patients with Partial Edentia. *Conferences* , 89–90. retrieved from http :// journals . scinnovations . uz / index . php / aposo / article / view /1111

10. Safarov MT et al. Evaluation of the Compensatory-Adaptive Mechanisms of Bridge Prosthetics at the Terminal Dentition Defects with the Use of Intraosseous Implants by the Method of Electromyography //American Journal of Medicine and Medical Sciences. – 2020. – T. 10. – No. 9. – pp. 657-659.

11. Safarov M. T. et al. Microbiological status of patients using artificial crowns supported by dental implants for peri-implantitis // Conferences. – 2023. – P. 376-379.

12. Safarov M.T., Ruzimbetov Kh.B., Safarova N.T., Kholboev H. (2023). Study of the Functional Efficiency of Bridges Fixed on Dental Implants. *Conferences* , 372–374. retrieved from http://journals.scinnovations.uz/index.php/aposo/article/view/902

13. Safarov, M., & Tashpulatova, K. (2022). Study Of The Microflora Of The Oral Cavity In Patients Using Dental Bridges With Dental Implants For Peri-Implantitis. *Conferences* , 172–173. retrieved from http://journals.scinnovations.uz/index.php/aposo/article/view/78

14. Safarov MT et al. Permanent prosthetics on dental implants //Eurasian Journal of Otorhinolaryngology-Head and Neck Surgery. – 2023. – T. 2. – S. 70-74. https://doi.org/10.57231/j.ejohns.2023.2.3.012

15. Safarov M.T., Akhmadzhonov M., Ruzimbetov A. Study of microbiological status in patients with perimplantitis in the area of bridges. – Conferences, 2022.

16. Safarov MT, Tashpulatova KM, Ruzimbetov HB To Question About Osteointegration Dental Implants And Ways Her Stimulations //TADQIQOTLAR. – 2023. – T. 27. – No. 3. – pp. 82-89.

17. Safarov MT, Tashpulatova KM, Ruzimbetov HB Modern Representation About Osteointegration Of Dental Implants //TADQIQOTLAR. – 2023. – T. 27. – No. 3. – pp. 98-106.

18. Safarov MT, Tashpulatova KM, Ruzimbetov HB The Problem Of Inflammation In Peri-Implant Tissue And Factors Affecting Its Course //TADQIQOTLAR. – 2023. – T. 27. – No. 3. – pp. 90-97.

19. Musaeva K. A. et al. Biomechanics of fixed full-arch prostheses supported by implants // Conferences . – 2023. – P. 370-372.

20. Musaeva , K. (2023). Prosthodontic treatment of patients with osteoporosis. Current problems of dentistry and maxillofacial surgery 4, 1(02), 103. retrieved from https://inlibrary.uz/index.php/problems-dentistry/article/view/16170

21. Musaeva K. A. On the Issue of Orthopedic Rehabilitation for Osteoporosis //Conferences. – 2022. – P. 90-91.

22. Musaeva, K., Asom, B., & Saliev, S. (2018). Improving the fixation of complete removable plate dentures in conditions of severe atrophy in the area of the maxillary tuberosities. Stomatologiya, 1(2(71), 27–28. retrieved from https://inlibrary.uz/index.php/stomatologiya/article/view/1714

23. Musaeva, K. (2017). Features of the dental status of patients with chronic kidney disease. Stomatologiya 1 ( 1 ( 66 ) , 62–64 . retrieved from https://inlibrary.uz/index.php/stomatologiya/article/view/2364

24. Experience in the use of mathematical modeling to predict the long-term durability of prosthetics on dental implants. (application of mathematical modeling in prosthetics on implants.). (2024). Western European Journal of Modern Experiments and Scientific Methods, 2(3), 14-23. https://westerneuropeanstudies.com/index.php/1/article/view/453

25. Tashpulatovich S. M. et al. Dental implants as the most appropriate method of anchoring fixed prostheses //international journal of european research output. – 2024. – Т. 3. – №. 5. – С. 79-85. http://ijero.co.uk/index.php/ijero/index

26. Tashpulatovich S. M. et al. Structural characteristics of peri-implant soft tissue factors influencing the development of inflammation in the implant cavity and peri-implant //Ta'lim innovatsiyasi va integratsiyasi. – 2024. – Т. 18. – №. 6. – С. 106-111.

27. Tashpulatovich S. M. et al. Structural characteristics of peri-implant soft tissue factors influencing the development of inflammation in the implant cavity and peri-implant //Ta'lim innovatsiyasi va integratsiyasi. – 2024. – Т. 18. – №. 6. – С. 106-111.

28. Tashpulatovich S. M. et al. Research to assess microcirculation parameters and morphofunction of gingival tissue during prosthetics on dental implants //Ta'lim innovatsiyasi va integratsiyasi. – 2024. – Т. 18. – №. 6. – С. 93-96.

29. Сафаров М. Т. и др. Сопоставление способов закрепления несъемных ортопедических конструкций с использованием имплантатов //Ta'lim innovatsiyasi va integratsiyasi. – 2024. – Т. 18. – №. 6. – С. 97-105.

30. Tashpulatovich S. M. et al. Analysis of complications arising during prosthetics with fixed constructions of dental prostheses fixed on two-stage osteointegrated screw implants, their elimination and prevention //Лучшие интеллектуальные исследования. – 2023. – Т. 10. – №. 5. – С. 163-167.

31. Tashpulatovich S. M. et al. Frequency and structure of clinical complications depending on the method of fixing a fixed prosthetic construction on dental implants //Лучшие интеллектуальные исследования. – 2023. – Т. 10. – №. 5. – С. 159-162.

32. Tashpulatovich S. M. et al. Biomechanical problems of cement fixation of artificial crowns on implants //Лучшие интеллектуальные исследования. – 2023. – Т. 10. – №. 5. – С. 151-158.

33. Tashpulatovich S. M. et al. Clinical aspects of the application of an individual reconstructive implant from lyophilized allogenic material in severe atrophy of jaw bone tissue //tadqiqotlar. – 2023. – Т. 27. – №. 4. – С. 136-146.

34. Tashpulatovich S. M. et al. Sociological aspects modern dental implantations when planning fixed dental prosthetics //tadqiqotlar. Uz. – 2023. – Т. 27. – №. 4. – С. 127-135.

35. Tashpulatovich S. M. et al. Comparative mathematical modeling of strength and deformation parameters of metal-ceramic crowns with screw and cement fixation to implants //tadqiqotlar. – 2023. – Т. 27. – №. 4. – С. 147-152.
36. Гаффаров С. А., Сафаров М. Т., Шарипов С. С. Қаннын интегральді керсеткіштеріне алынбайтын кепірлі протездердіц эсер етуі //Материал Международного Конгрессса стоматологов. – 2014. – С. 14-16
37. Хабилов Н. Л. и др. госпитал ортопедик стоматология кафедраси йил давомида нашр этилган тезислар хисоботи //Conferences. – 2023. – С. 114-118.
38. Сафаров М., Мусаева К., Шарипов С. Олинмайдиган кўприксимон тиш протезларининг оғиз бўшлиғи микробиологик ҳолатига таъсири //Stomatologiya. – 2017. – Т. 1. – №. 2 (67). – С. 51-54.
39. Сафаров М. и др. Влияние несъемных зубных протезов различной конструкции на микробиологические и иммунологические показатели полости рта //Stomatologiya. – 2014. – Т. 1. – №. 1 (55). – С. 18-23.

## ОРТОПЕДИЧЕСКИЕ АСПЕКТЫ ПРОТЕЗИРОВАНИЯ ПАЦИЕНТОВ С ОПОРОЙ НА ИМПЛАНТАТЫ ПРИ ПОЛНОЙ ВТОРИЧНОЙ АДЕНТИИ

*Сафаров Мурод Ташпулатович, НормуродоваРухсора Зокир кизи.*
*Ташкентский государственный стоматологический институт,*
*Кафедра: Госпитальной ортопедичекойстоматологии*
*www.ruxsoran@.ru*

**Аннотация.** Выбор конструкции протеза с опорой на имплантаты предусматривает следование

биомеханическим принципам, которые действуют в системе супраструктура-имплантат-кость.

В работе представлены пути практического решения данной клинической задачи, включая комплексное клиническое обследование.

При полной вторичной адентии комплексная оценка клинического состояния полости рта с учетом индивидуальных особенностей, а также возможности развития локальных и системных реакций организма пациента позволяет выбрать оптимальный вид лечения. В случае выполнения протезирования с опорой на имплантаты, технические особенности установки имплантатов, а также качество и нюансы пространственного размещения установленных зубных протезов имеют определяющее значение для комфортного, длительного ношения протезов и срока службы абатментов, принимающих на себя жевательные и окклюзионные нагрузки [14]. Современное принципиальное положение протезирования с опорой на имплантаты заключается в соблюдении условий ранней этапно-прогредиентной(нарастающей) нагрузки на имплантаты от съемного протеза [14]. Таким образом, уже в первые недели после имплантации жевательная нагрузка способствует развитию структурно-функционального ремоделированияпараимплантатной кости без надобности открытия имплантатов.