

RESEARCH TO ASSESS MICROCIRCULATION PARAMETERS AND MORPHOFUNCTION OF GINGIVAL TISSUE DURING PROSTHETICS ON DENTAL IMPLANTS.

*Safarov Murod Tashpulatovich
Musayeva Karima Alisherovna
Tashpulatova Kamilla Maratovna
Ruzimbetov Hayot Bazorboyevich
Safarova Nilufar Tashpulatovna*

*Department of Hospital Orthopedic Dentistry,
Tashkent State Dental Institute*

By now time accumulated enough extensive experience in using the orthopedic method treatment of defects dental rows With support on implants. However, despite for certain achievements V region implantology , the incidence of complications remains high. When using prosthetics with The use of implants causes changes in the condition of the gums.

Goals our works: study clinical state soft fabrics peri-implant region in patients with partial defects of the dentition before and after prosthetics with implant-supported structures. Research peculiarities state microcirculation V fabrics gums V region implantation estimate the nature of morphofunctional changes before and after orthopedic treatment.

Orthopedic treatment carried out With using metal-ceramic single crowns Prosthetics were performed according to generally accepted methods.

Dynamic observations behind condition microcirculation V peri-implant fabrics were carried out before And through 1, 3 week And 1, 3, 6 months after prosthetics.

The study of microcirculation in periodontal tissues was carried out using laser Doppler flowmetry using the LAKK-01 apparatus (NPP "Lazma") The state of microcirculation was assessed by indicator microcirculation (M); parameter – σ , coefficient variations (K_v). Also the level of vasomotion (A_{LF}/σ) and vascular tone were determined (σ/ALF), high frequency (A_{HF}/σ) And pulse fluctuations (ACF/σ) tissue blood flow, index fluxmotion (IFM), as well as intravascular resistance (A_{CF}/M).

For quantitative estimates character And intensity morphofunctional changes V mucous membrane In the gingival shell of the peri-implant area, a cytomorphometric method was used to determine the destruction index indicators (ID) and inflammatory-destructive index (VDI). Fence material for Cytomorphometric research was carried out using the imprint method from the gum surface in the area of implantation.

The average values of the ID and VDI indicators, which correspond to different

states of soft tissues, are as follows: ID = 0–550, VDI = 0–20 – normal state ; ID = 550–900, VDI = 21.0–50.0 – mild inflammation; ID = 900–2000, VDI = 9.0–50.0 and above – moderate inflammation.

Conclusions. Analysis indicators microcirculation before And after implantation allows count, What restoration of tissue blood flow occurs 4 months after implantation. Examination of LDF data suggests that V answer on functional load after prosthetics through 1 a week V fabrics gums noted height capillary blood flow, which corresponds to the development of hyperemia in the microvasculature. Normalization of hemomicrocirculation occurred by the first month after prosthetics. Results of cytomorphometric study confirmed indicators LDF O reactive change state fabrics gums, which manifested itself in in the form of an increase in the index of destruction and inflammatory-destructive index 2 weeks after prosthetics (ID = 890.5; VDI = 58.5). Decline indexes before normal indicators happened To 1 month after prosthetics (ID = 552.6; VDI = 222.2).

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 KM, Safarov MT, Sharipov SS, Ruzimbetov HB (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 MT 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 KA 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 KA 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>