TO THE CHAIRMAN AND MEMBERS

OF A SCIENTIFIC JURY

APPOINTED BY ORDER No. R-543/14.02.2024

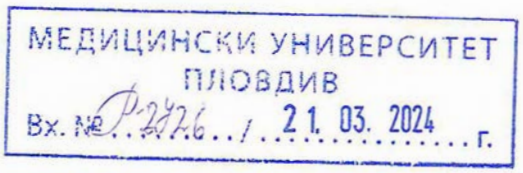
TO THE RECTOR OF MEDICAL UNIVERSITY - PLOVDIV

BY COMPETITION FOR BORROWING OF

ACADEMIC POSITION "DOCTOR" IN

DEPARTMENT OF "PROSTHETIC DENTAL MEDICINE"

MEDICAL UNIVERSITY - PLOVDIV



EXPERT OPINION

by Associate Professor Dr. Rangel Georgiev Todorov, Ph.D

Department of Prosthetic Dentistry

Faculty of Dentistry, Medical University-Sofia

of a PhD thesis for awarding the educational and scientific degree "doctor", doctoral program "Prosthetic Dentistry"

Author: Dr. Onnik Garo Chaprashikian

Form of doctoral studies: independent preparation

Department: "Prosthetic Dentistry", Faculty of Dental Medicine, Medical University-Plovdiv

Topic: "PALATINAL VALVE ZONE - LABORATORY AND DENTAL STUDIES"

Research supervisor: Prof. Dr. Yavor Kalachev, MD

I. Presentation of the procedure

This opinion was prepared on the basis of order No. R-543/14.02.2024 of the Rector of the Medical University - Plovdiv on the basis of Article 4, par. 2 of the ZRASRB, in implementation of Article 30, par. 3 of the Regulations for the Implementation of the ZRASRB of the Medical University - Plovdiv, on protocol No. 1 of the first meeting of the Scientific Jury on the procedure and public defense of a dissertation work for the acquisition of the educational and scientific degree "Doctor".

II. Dissertation work

The dissertation work submitted to me for the preparation of an opinion is presented in a total of two hundred and ten pages, which are distributed as follows - table of contents covering two pages, abbreviations used occupying one page, introduction in two pages, literature review located on fifty-six pages, analysis of the literature review on two pages, the formulation of aim and objectives covers one page, material and methodology spread over twenty-two pages, results and discussion spread over forty-eight pages. The bibliography contains two hundred and eighteen sources, of which thirty-six are in Cyrillic. The dissertation development is illustrated with thirty-eight tables, seventy-three diagrams and eight appendices.

1. Relevance of the topic

The relevance of the developed problem is already formed in the introduction of the dissertation work, as the topic regarding the treatment of completely edentulous patients, the problems and reasons related to the retention of the complete prostheses, focusing on the palatal valve and anatomical space of the A-line, is touched upon.

2. Knowing the problem

The literature review clearly and consistently clarifies the problem regarding the importance of the palatal valve area in prosthetics with total maxillary prostheses. At the beginning of the barn, within almost twenty pages, Dr. Chaprashikian quite precisely and in detail dwells on the examination of the anatomical substrate and features of the vibration lines. In seven pages, the press-indicator pastes are examined, paying attention to their composition, knowledge them by the dentists.

The peculiarities of processing, aging and deformation of the main material - the acrylic plastic - are quite rightly considered, being connected with the peculiarities of the palatal valve, as an indispensable part and important for ensuring a hermetic effect and stability. In addition, they are. In two pages, an accurate analysis of the literature review was carried out, describing the fully clarified, insufficiently clarified and unresolved scientific questions that logically lead to the selection of a goal and the tasks to it.

3. Material and Methodology

The purpose and resulting tasks are clearly and accurately formulated, correspond to the title and content of the dissertation.

Task 1

To conduct a survey regarding the awareness of LDM about the features of the palatal valve area and the ways of shaping the palatal valve.

Task 2

To conduct a clinical examination of the palatal valve area and the palatal valve in patients with upper complete dentures.

Task 3

To develop and implement a method to measure the slope of the soft palate (the angular ratio between hard and soft palate).

Task 4

To create and approve a modified protocol for forming a palatal valve of an upper complete prosthesis according to the conventional Winkler methodology.

The **material** on which the research was conducted is sufficient to derive statistically reliable scientific results. The number of LDM surveyed in the first task was 95. In the second task, 228 patients were examined. According to the third task, 227 working models were studied. Our own methodology for forming a palatal valve was tested on 46 patients.

All used research methods allow solving the set goal and tasks in the dissertation work.

4. Characterization and evaluation of the dissertation work and contributions

The results obtained on all four tasks are reliable, correctly statistically processed and comprehensively presented in the dissertation work. All of them have a marked scientific and applied character.

In the discussion of the results, a comparative analysis was carried out with similar scientific studies of other authors, and the reasons for the difference or coincidence of the established data were highlighted. The results, which are the contribution of the doctoral student and are important in scientific and applied terms, are highlighted.

The contributions of the dissertation are of an up-to-date, confirmatory and scientific-applied nature.

Contributions of a topical nature

1. For the first time in our country, a survey was conducted among LDMs regarding their awareness regarding the anatomical features of the PC and the methods of PC construction.

2. For the first time in our country, a clinical study of the anatomical features of the PCV and the quality of PU in patients with CPG was conducted.

3. A simple and effective paraclinical method for measuring the slope of the soft palate was created.

4. A method was created using the PIP to establish the quality of the PU of IL and OS.

5. A clinical protocol has been created for the effective formation of PC of GCP.

Contributions of a confirmatory nature

1. The importance of PC for the retention of GCP was confirmed.

2. The opinion that Class II inclination of the soft palate is the most common was confirmed.

Contributions of a scientific and applied nature

1. In addition to being a means of diagnosing areas subjected to overpressure, PIPs can also be used to register quality PU.

2. An attachment was created that enables paraclinical measurement of the slope of the soft palate with a digital inclinometer.

The **conclusions** are well formulated and they emphasize the completion of the dissertation work:

1. The survey revealed a tendency for successive accumulations of inappropriate clinical solutions, to which the shortcomings of the most widely used materials and technologies (acrylic plastic and press technique) are superimposed.

2. PC construction is influenced by clinical anatomy.

3. Reaching and covering the anatomical landmarks is not a sufficient condition for quality PC. This finding is extremely important from a clinical point of view.

4. The PK should exert moderate pressure on the mucosa within physiological tolerance. This means a tight contact between the soft palate and the mucosal surface of the prosthesis, both at rest and during function.

5. Although in the greater percentage of cases we found a favorable anatomy of the PG, this did not affect the quality construction of the PC and, respectively, the fabrication of the PG with good retention.

6. The number of patients with favorable House-Millsap Class I and Class II soft palates, which facilitate the formation of a quality PC, is the largest. This finding did not correspond to the results of a second task, where the presence of a quality PK was found to be more of an exception.

7. Checking PU with PIP is a safe and effective method for clinical practice. This finding makes it possible to expand the methods used in clinical practice.

8. The number of patients with good GCP retention is higher in cases with PK constructed according to the modified Winkier methodology.

9. When applying the conventional methodology of Winkler, a PU registered through PIP is not established.

10. Completed GCPs according to the modified Winkler methodology show better PU registered by PIP.

11. When applying the modified Winkler methodology, it is guaranteed that no gap will appear between the soft palate and the prosthetic plate when pronouncing the sound "A", respectively during a function.

12. With our modified Winkler methodology, controlled erasure of the plaster model is achieved and the subjective moment is eliminated in the construction of PK by average values

5. Assessment of the publications and personal contribution of the doctoral student

Publications and participation in scientific forums related to the dissertation represent the most essential parts of the dissertation work.

Full-text publications

1. Iordanova, Miroslava V., Svetlana V. Iordanova, and Onnik G. Chaprashikian. "Changes of the facial soft tissue profile in complete denture prosthetic treatment." Folia Medica 48.3-4 (2006): 74-78.

2. Chaprashikyan O., Ya. Kalachev, Palatal valve. Importance and anatomical features of the underlying area - first part, Dental medicine, 2/2014, 173-179

3. Chaprashikyan O., Ya. Kalachev, Palatal valve. Anatomical features of the underlying area. Guidelines for construction - second part, Dental medicine, 3/2014, 251-258

4. Chaprashikyan O., Hr. Kisov, Ya. Kalchev, Methods of assessing contacts between the base of a new complete prosthesis and the prosthetic bed, Current issues of modern dentistry, Collection of scientific works, Moscow, 2018, 271-273

Contributions

1. Chaprashikyan O., How to rationalize clinical manipulations for prosthetics in patients with complete edentulism., The clinical set of "Kandulor", XVII Congress of the Bulgarian Academy of Aesthetic Dentistry, Sliven, 19.11.2016, PLENARY LECTURE .

2. Chaprashikyan O., The impression with plaster, a forgotten alternative in prosthetics with full dentures. Is Prof. Boyanov's recipe effective, XVII Congress of the Bulgarian Academy of Aesthetic Dentistry, Sliven, 11/19/2016, PLENARY LECTURE.

3. Chaprashikyan O., Ya. Zhekov, Ya. Kalchev, M. Vasilchev, Complete prostheses with palatal valve seal. Clinical cases from the practical exercises at the Clinic of Prosthetic Dentistry of the FDM - Plovdiv, "Anniversary Online Scientific Conference, Department of Prosthetic Dentistry - Plovdiv at 50", 8-9.12.2021, REPORT

6. Abstract

The abstract meets the requirements, is divided into sections and covers a volume of sixty-eight pages, and reflects in abbreviated form the main results and contributions achieved in the dissertation development. The author's publications in connection with the dissertation are also indicated in the abstract.

III. Critical remarks and recommendations

I do not have any critical remarks about the dissertation work, abstract and scientific research conducted by Dr. Chaprashikyan.

IV. CONCLUSION

The structure of the PhD thesis submitted to me for review fully meets the requirements for such a scientific development, as it structurally contains all the necessary parts - introduction, literature review, analysis of the literature review, aim and objectives, own research - material and methods, results and discussion of the results , conclusions, contributions, bibliography and appendices.

The PhD thesis contains scientific, scientific-applied and applied results, which represent an original contribution to science and meet all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB), the Regulations for the Implementation of ZRASRB and the Regulations of the MU - Plovdiv. The presented materials and dissertation results fully correspond to the specific requirements adopted in connection with the Regulations of the Ministry of Education - Plovdiv for the application of the ZRASRB.

The PhD thesis shows that the doctoral student Dr. Chaprishikyan possesses in-depth theoretical knowledge and professional skills in the scientific specialty "Prosthetic Dentistry", demonstrating qualities and skills for independent conduct of scientific research. Fortunately, I have observations of the candidate's skills in the given scientific field and beyond the dissertation work. These observations confirm my current opinion.

As a result of the reviewed dissertation work, abstract, achieved results and contributions, I give my positive assessment and will vote categorically with YES for the awarding of the educational and scientific degree "doctor" for the conducted scientific research of Dr. Onnik Garo Chaprashikyan.

18.03.2024

Sofia

Associate Professor Rangel Todorov, Ph.D