

STATEMENT

by

Assoc. Prof. Asya Zaharieva Krasteva-Panova, DMD, PhD, DSc

Associate professor at the Department of Imaging and Oral Diagnostics,

Faculty of Dental Medicine, Medical University of Sofia

Regarding: obtaining the educational and scientific degree “Doctor” in the field of Higher education 7. Healthcare and Sports.

Professional field 7.2. Dental Medicine.

Doctoral program “Oral surgery”

For the dissertation work **“Ridge Preservation Using Guided Regeneration, Free Gingival Grafts, and Platelet-rich Plasma”**

Author:

Ralitsa Vladimirova Yotsova, DMD

A Ph.D. student in a full-time Ph.D. program and procedure for obtaining the educational and scientific degree “Doctor” at the Department of Oral Surgery, Faculty of Dental Medicine, Medical University of Varna

Scientific Supervisor: Prof. Rossen Kolarov, DMD, Ph.D

1. General Description

The statement was prepared by Order № P-109-307/12.06.2023 by the Rector of MU-Varna.

The submitted set of materials on print and electronic media is by Art. 44 (3) of the Regulations for the Development of the Academic Staff of MU-Varna.

The dissertation contains 283 pages and is illustrated by 133 tables and 123 figures. The bibliography consists of 561 literature sources, 4 of which are in Cyrillic and 557 in Latin. It is well-structured. Its table of contents includes an introduction; literature review; summary and critical analysis; aim and tasks; materials and methods; results and discussion; conclusions; contributions; bibliography and list of articles related to the dissertation; applications.

Three scientific publications, related to the dissertation, have been submitted in which Dr. Yotsova is the first author.

2. Brief biographical data

Dr. **Ralitsa Vladimirova Yotsova** was born in 1992 in the town of Omurtag.

In 2011 Dr. Yotsova graduated from the First Language School – Varna.

In 2017 she graduated from the Medical University of Varna "Prof. Dr. Paraskev Stoyanov" with a Master's degree "Doctor in Dental Medicine".

In 2017 she was a part-time assistant at the Department of Oral and Maxillofacial Surgery, Faculty of Dental Medicine, MU-Varna and since 2018 she has been a full-time assistant at the same department.

Since January 2020 she has been enrolled as a Ph.D. student in a full-time doctoral program "Oral Surgery".

Speaks fluent English.

Member of the BDA.

3. Relevance of the topic

Dental implantology is an innovative specialty that has been developing at an extremely rapid pace and gives solutions to the cases, previously regarded as insurmountable. The establishment of sufficient hard and soft tissue volume is a key prerequisite for successful implant therapy, especially when intraosseous implants, the most commonly used nowadays, are used.

Numerous techniques are used to address these challenges and create optimal conditions for implantation with sufficient hard and soft tissue volume and, accordingly, functional and aesthetic results.

The topic selection is up-to-date as there is no data in the country concerning the application of full-thickness gingival grafts and platelet-rich plasma for reducing the external resorption of the alveolar ridge and promoting bone formation in the socket.

4. Understanding of the issue

The Ph.D. student has studied the literature data on the healing of post-extraction sockets with bone grafting materials and autologous platelet concentrates. Post-extraction resorption, factors influencing the process, and the results following ridge preservation procedures have been analyzed as well. In a separate section, the Ph.D. student paid attention to bone grafting materials, barrier membranes, and different types of ridge preservation procedures.

5. Structure of the dissertation

The analysis of the data in the literature review reflects the excellent awareness of the Ph.D. student regarding the problem, which is the basis for accurate determination of the unsolved problems and correct definition of the purpose and tasks of the dissertation. Aim, tasks and research methods, results, and summary of results follow.

6. Research methods. Aim, tasks, materials and methods

The aim of the dissertation corresponds to the lack of data in the Bulgarian literature regarding the influence of platelet-rich plasma, non-porous PTFE barrier membranes, and autogenous free gingival grafts on the healing processes in the post-extraction sites.

The five tasks logically follow the concept, allowing for the implementation of the study.

The materials and methods are correctly selected and adapted to the aim and tasks of the dissertation.

The statistical methods used are excellently selected and allow an accurate analysis of the obtained data and their presentation.

7. Results and discussion

The results and discussion are presented correctly and in detail and again demonstrate an in-depth understanding of the issue by the Ph.D. student.

One of the important conclusions of the dissertation is that it is not necessary to perform ridge preservation after each extraction, but it has an important application in the following situations: thin walls of the post-extraction sockets (<2mm); areas with increased aesthetic risk; impaired integrity of the walls; multiple extractions; risk of involvement of some anatomical structures and delayed implantation.

The results of the dissertation demonstrate that the considered methods successfully reduce the amount of vertical post-extraction ridge resorption. They give similar results and no significant superiority of any of them has been reported.

Post-extraction bone resorption may necessitate additional regenerative procedures during or before implant treatment. The application of ridge preservation aims to preserve the tissue volume, avoid the need for guided bone regeneration and facilitate prosthetic rehabilitation, and prosthetic-guided implantation.

8. Conclusions and contributions

Nine conclusions were formulated, based on the results of the tasks of the dissertation, of which conclusions 1 and 4 are of particular importance for the clinical practice: namely, that the application of the considered methods for ridge preservation (with non-porous PTFE membranes; with non-porous PTFE membranes and PRP; with free full-thickness gingival grafts) reduces the vertical resorption of the buccal and palatal bone walls; and that ridge preservation procedures reduce the risk of vertical loss > 2 mm in both socket walls over 3 months.

The contributions of the dissertation were also described, of which the innovations in the dissertation are worth noting – for the first time, the simultaneous use of non-porous PTFE membranes and platelet-rich plasma as a method for guided regeneration in post-extraction sockets was investigated.

Conclusion

The aforementioned gives me a reason to accept the dissertation of **Dr. Ralitsa Vladimirova Yotsova** on the topic **“Ridge Preservation Using Guided Regeneration, Free Gingival Grafts, and Platelet-rich Plasma”** as completed. Based on everything noted here, I accept that the requirements of

the Law for the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its Implementation, and the relevant Regulations of MU-Varna have been fulfilled. The presented materials and dissertation results fully correspond to the specific requirements of MU-Varna.

I support and confirm my positive vote for awarding the educational and scientific degree "doctor" to Dr. Ralitsa Vladimirova Yotsova

19.08.2023

Sofia



Assoc. Prof. Asya Zaharieva Krasteva-Panova, DMD, PhD, DSc