#### **STATEMENT**

In connection with a dissertation for the award of the educational and scientific degree "DOCTOR" on the topic: "Postoperative period in rhinosurgery – tamponade, splints, postoperative care after nasal operations – types, necessity, effectiveness "

### Author of the dissertation:

Dr. Polina Petrova Ivanova, PhD student in the full-time form of the doctoral program of "Otorhinolaryngology" - Department of "Neurosurgery and ENT Diseases", Faculty of Medicine, MU "Prof. Dr. Paraskev Stoyanov" Varna

## **Supervisor:**

Assoc. Prof. Dr. Georgi Petkov Iliev, MD,

# Member of the Scientific Jury who prepared the review

- Assoc. Prof. Dr. Alexander Valkov Valkov, MD, Department of Ophthalmology, ENT Diseases and Oral and Maxillofacial Surgery with Surgical Dentistry, Department of Ear, Nose and Throat Diseases, Medical University of Pleven, Pleven.

The review was prepared in according to the Law on the Development of the Academic Staff, the Regulations for the Application and the Regulations for the Terms and Procedures for Acquiring Scientific Degrees and Holding Academic Positions at MU-Varna. The scientific jury for the public defense of the dissertation was determined by order of the Rector of the Medical University - Varna No. № P-109-414/25.11.2024. The presented set of materials on paper / electronic media is in accordance with the procedure for acquiring the "doctor" and the regulations of the MU - Varna.

**Dr. Polina Petrova Ivanova** was born on 28.09.1994. In 2019 graduated with a master's degree in Medicine at the Medical University of Varna and began her professional career as a ENT resident immediately after completing her higher education. In April 2020. She was enrolled as a doctoral student in an full-time form of study in the doctoral program "Otorhinolaryngology" at the Medical University of Varna. **Dr. Ivanova** completed all the tasks and activities set out in the individual study plan on time. She successfully passed the doctoral minimum exam.

### Structure of the dissertation:

The dissertation of **Dr. Polina Petrova Ivanova** is written on 125 standard pages, of which:

- 1. Title page 1
- 2. Content -3
- 3. Abbreviations used in Bulgarian -1
- 4. Introduction 3
- 5. Literary review 49
- 6. Purpose and tasks 1
- 7. Materials and methods 9
- 8. Results 39
- 9. Discussion 10

- 10. Conclusions 1
- 11. Contributions of the dissertation -2
- 12. Publications related to the dissertation work -2
- 13. Bibliography 14

The ratio overview: methodical: result-examining part is optimal, respectively 30:10:60%. The dissertation contains a total of 56 figures, 10 tables. The bibliography includes 185 sources, of which are in Latin. All cited titles are directly related to the research problem.

On the topic of the dissertation, the candidate has published two works, accepted and printed in the journals "CUREUS" and "Varna Medical Forum". Based on this, the scientific activity in the period of preparation of the work is evaluated as satisfactory.

## Characteristic features of work:

The topic of the dissertation "Postoperative period in rhinosurgery - tamponade, splints, care after nasal surgery - types, necessity, effectiveness" is well chosen in terms of the significance of the problem,

The literature review is made up of 39 pages and presents the author as an expert on the subject. The following topics are consistently covered: intranasal tamponade and splints and an analysis of their types, benefits, advantages and specifics of their placement in (rhino)septoplasty, drug treatment after rhinoplasty, mucociliary clearance, bacterial biofilms and conclusions from the literature review.

The purpose of the study is precisely and clearly formulated, namely To investigate the effects of various intranasal tamponades and splints after (rhino)septoplasty, thus compiling guidelines for their use and the conduct of the postoperative period. To achieve this, the dissertation author has defined 6 main tasks in his dissertation work:

- 1. To study and classify the types of postoperative intranasal tamponades and splints in the literature.
- 2. To evaluate the role of intranasal postoperative tamponades and splints on early and late complications after rhinosurgery.
- 3. To conduct a survey of patients undergoing rhinosurgery on the impact of postoperative intranasal tamponades and splints on pain and comfort in the postoperative period.
- 4. To evaluate the impact of postoperative intranasal tamponades and splints on mucociliary clearance using the saccharin test.
- 5. To evaluate the impact of postoperative intranasal tamponades and splints on bacterial colonization and the risk of infection.
- 6. To derive guidelines for the use of intranasal tamponades and splints after septoplasty.

The very formation of the sequence of tasks is an example of structuring a scientific study - analyzing the pathology, creating a patient profile related to risk factors, investigating risk factors related to the postoperative period and the recovery of patients after rhinosurgery, studying mucociliary clearance in these groups of patients.

**The results obtained are convincing**. They are presented clearly, accurately - in general for the studied contingent, as well as by subgroups, giving the opportunity to track and compare the data. Fully appropriate statistical methods were used to obtain them. Each chapter ends

with a summary of the obtained data, as the doctoral student makes a successful attempt to integrate them in order to build an optimized system approach.

The conclusion corresponds to the results obtained, the same applies to the conclusions made. The contributions of the dissertation are of a clearly scientific-applied nature, well formulated and are the result of the study. The thorough literature review and the illustrative data collected during the study provide a clear idea of the gold standards in postoperative care in rhinosurgery and their application. Of particular interest is the comparative analysis of mucociliary clearance pre- and postoperatively in different groups of patients in relation to the imposed tamponade, nasal splints and transmucoseptal sutures and the analysis of the influence of the studied risk and demographic factors on the result.

The results of the dissertation confirm, clarify, supplement and enrich the knowledge regarding postoperative care in rhinosurgery and guidelines for the correct approach to the individual patient who has undergone rhinosurgery, as the study is of practical value for our country.

Conclusion: In conclusion, the dissertation presented by **Dr. Polina Petrova Ivanova** contains scientific, scientific-applied and applied results, which represent an original contribution to science and meet the requirements for awarding the educational and scientific degree "**DOCTOR**". The dissertation shows that the doctoral student has in-depth theoretical knowledge and professional skills in the scientific specialty, demonstrating qualities and skills for independent conduct and discussion of scientific research. On these grounds, I propose to the respected members of the Scientific Jury to vote positively and propose to the Rector of the MU - Varna to award the scientific and educational degree "**Doctor**" in the scientific specialty "Otorhinolaryngology" to **Dr. Polina Petrova Ivanova**, Department of "Neurosurgery and ENT Diseases", Faculty of Medicine, MU "Prof. Dr. Paraskev Stoyanov" Varna.

Заличено на основание чл. 5, §1, б. "В" от Регламент (ЕС) 2016/679

10.01.2025

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