

STATEMENT

by

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About: the dissertation for awarding the educational and scientific degree “Doctor”, Professional field: 7.1 Medicine, Thoracic surgery

Author: Dr. Velizar Dafinov Hadzhiminev

Department of Special surgery, MU – Plovdiv, independent doctoral candidate

Topic: „Secondary spontaneous pneumothorax – a study on diagnostic and therapeutic approach“

Supervisor: Assoc. Prof. Ivan Novakov, MD, DSc

The doctoral candidate has submitted a dissertation, abstract, list of publications on the topic of the dissertation, which is in full compliance with the rules of the Medical University - Plovdiv for the acquisition of ESD "Doctor".

Brief biographical data about the student

Dr. Velizar Dafinov Hadzhiminev was born on March 22, 1988. In 2013 he graduated from the Medical University of Varna. He specialized in surgery at the "Second Clinic of Surgery" of the University Hospital "St. George - Plovdiv. In 2019 he acquired a degree in surgery. From 2017 to 2021 he was an assistant professor at the Department of Special Surgery at the Medical University of Plovdiv. Since September 2021 he has been an assistant in the Department of Propaedeutics of Surgical Diseases, Department of Surgery at the Medical University of Plovdiv. He has participated in courses and seminars in Bulgaria and abroad.

Structure of the dissertation

The dissertation is written on 148 pages. The dependencies that have been found are presented and illustrated with 37 figures, 12 tables and 1 scheme. It is evenly divided into the following parts: Introduction, Objectives, Tasks,

Materials and Methods, Results, Discussion, Conclusions and Contributions. The bibliography contains 210 literature sources.

Relevance and significance of the dissertation

Secondary spontaneous pneumothorax accounts for a significant proportion of patients with pneumothorax. These patients have reduced lung capacity due to the underlying one or more lung diseases, which makes their timely diagnosis, adequate treatment and follow-up extremely important. Secondary spontaneous pneumothorax is a problem affecting physicians in various specialties - surgeons, pulmonologists, anesthesiologists. It has a dynamic course of development, often relapses, often becomes tension, which is a life-threatening condition. This requires its timely surgical treatment, which has a significant percentage of complications.

Dr. Velizar Hadzhiminev has built his dissertation on a modern health problem - a comprehensive study on clinical, diagnostic and therapeutic aspects of secondary spontaneous pneumothorax.

The structure of the literature review, the formulation of the goal and related tasks, the presentation of the results and their analysis show that Dr. Hadzhiminev has an in-depth research view of the scientific problem put under consideration.

Characteristics and evaluation of the dissertation

The literature review is balanced, well structured and covers all aspects of diagnosis, surgical treatment and modern minimally invasive techniques.

The aim is short and clear – to study in detail the clinical-diagnostic and therapeutic aspects of secondary spontaneous pneumothorax.

The five tasks are precisely and consistently formulated. The dissertation has achieved an adequate answer to each of them.

The dissertation was realized on 179 patients. Of these, 160 were studied retrospectively and 19 were followed prospectively for a period of 6 months. The study covered the period 2014 - 2020. The patients included in it were hospitalized and treated in the Second Clinic of Surgery of the University Hospital "St. George" - Plovdiv. Clinical, laboratory and instrumental methods of examination of patients were used. The analysis of the results was performed using appropriate statistical methods.

The results are structured correctly, with secondary spontaneous pneumothorax being found to be more common in males and patients over 55 years of age. COVID-19 pneumonia has been associated with occurrence of pneumothorax, and these patients have a worse prognosis. Tube thoracostomy has been presented as a therapeutic method of choice in patients with secondary spontaneous pneumothorax. Continuous air leakage has been reported as the most common postoperative complication.

As a result of own experience and critical analysis of the literature, a diagnostic and therapeutic algorithm in patients with COPD and secondary spontaneous pneumothorax has been proposed by the author. The latter will be extremely useful in thoracic surgery.

The discussion presents own results and literature data about the different sections of the study.

The conclusions are clearly formulated and correspond to the set tasks. They are based on the main results of the study and the correct interpretation of the data.

The abstract contains 60 pages and meets the requirements and content of the dissertation, presenting the main results achieved in the study.

The actual number of scientific publications of Dr. Hadzhiminev related to the scientific work is four. He is leading author in all of them.

The presented dissertation shows that Dr. Hadzhiminev has managed to motivate a team of researchers to study the problem of "secondary spontaneous pneumothorax". He has a great personal contribution to the realization of the present dissertation. Dr. Hadzhiminev has conducted serious research on this medical problem, meeting the criteria for a dissertation.

Conclusion:

The dissertation of Dr. Hadzhiminev contains scientific and applied results that meet the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria and Regulations of MU - Plovdiv. The development of the dissertation "Secondary spontaneous pneumothorax - a study on diagnostic and therapeutic approach" shows that Dr. Hadzhiminev has in-depth theoretical knowledge and professional skills in the scientific specialty of Thoracic Surgery. Doctoral candidate has shown qualities and skills for independent research. Based on the above, I give my positive assessment of the

dissertation and the research. I propose to the esteemed scientific jury to award the educational and scientific degree "Doctor" to Velizar Hadzhiminev in the professional field 7.1 Medicine and doctoral program in the specialty "Thoracic Surgery".

A handwritten signature in blue ink, consisting of several fluid, overlapping strokes that form a stylized, abstract shape.

14.02.2022
Sofia

Assoc.Prof. Georgi Yankov, MD, PhD