STANDPOINT

by

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of the dissertation work entitled

OPERATIVE TREATMENT OF CAROTID ARTERIES IN MULTIFOCAL ATHEROSCLEROSIS

of Emil Dimitrov Jordanov, MD, PhD student in the doctoral programme of 'Vascular surgery' at the Department of Cardiovascular Surgery and Angiology of the Medical

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for the acquisition of the educational and scientific degree of 'doctor of philosophy' in the field of higher education No 7. Public health and sports, professional trend No 7.1.

Medicine and scientific speciality of 'Surgery'

Adviser: Prof. Veselin Petrov Petrov, MD, PhD

I am assigned to prepare the present standpoint according to the decision of the Scientific jury for the public defence of this dissertation work appointed according to Order of the Rector of the Medical University "Prof. Paraskev Stoyanov" of Varna No R-109-576/December 17, 2021, according to the Statute-book for the application of the Law for development of the academic staff in the Republic of Bulgaria and of the Statute-book for development of the academic staff in the Medical University of Varna.

The dissertation work contains 205 standard type-written pages. Its structure contains all the necessary sections and meets all the requirements for a similar scientific work. It is illustrated with 30 tables and 105 figures. The reference list contains a total of 230 source titles, of which there are 26 in Cyrillic and 204 in Latin. The cited sources have been published mainly during the last several years. The PhD student has two independent scientific articles on the topic of the dissertation published in 2021.

The dissertation work is characterized by undoubted actuality of the theme. Its medico-social importance is determined not only by the continuously rising incidence rate of the cerebro-vascular diseases in our country and worldwide but also by the necessity of timely and precise diagnosis and effective and safe operative treatment of the patients with advanced multifocal and, especially, with carotid atherosclerosis. This chronic and progressive disease of the arterial wall is the main cause for these acute and life-threatening diseases. We are facing the uninterrupted progress in the surgical treatment of the patients with damaged carotid arteries. The present dissertation work is namely devoted to two contemporary operative methods such as carotid endarterectomy and carotid stenting with angioplastics. The timely accomplished preoperative imaging diagnosis is a precondition for their effective application.

The review of the literature is a comprehensive and profound analysis of the publications by foreign and Bulgarian authors on these problems.

The PhD student clearly formulates the purpose of his dissertation. It consists in that to study in a comparative aspect PhD student's results from the application of the carotid endarterectomy and the carotid stenting with angioplastics in the patients with carotid atherosclerosis. Six concrete tasks are defined, too.

It deals with an eight-year retrospective investigation of the results from the surgical treatment of a total of 199 patients, 135 males and 64 females. Carotid endarterectomy is performed in 107 patients, 70 males and 37 females while stenting with angioplastics is done in 92 patients, 65 males and 27 females. The preoperative imaging diagnosis is accomplished by using of the following methods: computed tomography-assisted carotidography, Doppler sonography of the carotid arteries, diagnostic angiography and computed tomography of head/brain.

The PhD student carries out a profound analysis of the results obtained in various aspects. His own results are presented in five chapters. The imaging diagnostic methods and both surgical methods applied in the carotid arteries and the carotid bulbs affected by the atherosclerotic process are juxtaposed. The purposeful application of the stenting with angioplastics and the aortocoronary bypass in damaged arteries in other vascular basins is worth indicating, too.

The role of the serious chronic comorbidity among the patients with carotid atherosclerosis when selecting the most appropriate method of treatment is analyzed, too.

PhD student's own results are discussed and compared to data from the foreign literature on these problems in four chapters.

PhD student's achievements are generalized in six concrete conclusions. The effectiveness and safety of these methods of surgical treatment of the patients with carotid atherosclerosis is convincingly outlined. Five scientifically applicable contributions of confirmatory nature are defined and I agree with them.

The author's dissertation abstract completely meets the requirements for a similar scientific work.

In my opinion, the dissertation work given for standpoint and entitled 'Operative treatment of carotid arteries in multifocal atherosclerosis' is an original author's elaboration. I would like to point to some of its undoubted merits, e. g. thoroughness, accuracy, and truthfulness. Author's results could play a role for the improvement of vascular surgeons' research and practical clinical activity within multidisciplinary collectives. The PhD student Emil Dimitrov Jordanov, MD, presents with enviable theoretical knowledge and professional skills in vascular surgery. He convinces us of that he can successfully perform independent investigations of complex nature.

These ascertainments of mine enable me to completely positively evaluate the given dissertation work. I would like to propose to the honoured members of the Scientific jury to award the educational and scientific degree of 'doctor of philosophy' to Emil Dimitrov Jordanov, MD.

January 20, 2022

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