REVIEW

by Prof. Veselin Petrov Petrov, MD,

Medical University "Prof. Dr. Paraskev Stoyanov" - Varna,

Head of the Clinic of Vascular Surgery at MHAT "St. Marina" EAD - Varna,

Member of the scientific jury for the competition for the academic position "Professor" in the field of higher education 7. "Health and Sports", professional field 7.1. "Medicine",

scientific specialty "Vascular Surgery",

announced in SG no. 105 of 11.12.2020

Documents for the mentioned above competition have been submitted by one candidate - Assoc. Prof. Dr. Valentin Konstantinov Vasilev, MD.

The documents submitted by the candidate are in accordance with the requirements for acquiring the academic position "Professor" in the Law for the Development of the Academic Staff in the Republic of Bulgaria (RASRB), the Regulations for its implementation and the Regulations for the acquisition positions at the University "Prof. Dr. Asen Zlatarov" – Burgas. I do not find gaps in the submitted documentation.

Brief biographical data

Assoc. Prof. Valentin Konstantinov Vasilev graduated from the Medical Institute "I. P. Pavlov "-Plovdiv in 1985. Works in MHAT-Kazanlak-EOOD as an intern in the surgical department from 1985 to 2000, as head of the surgical department from 2000 to 2006 and as head of the vascular sector from 2006 to 2010. In 2010 he was appointed Head of the Department of Vascular Surgery at MHAT - Burgas. Assoc. Prof. Vasilev has two specialties - General Surgery and Vascular Surgery. He received his doctorate in 2010 after defending a dissertation on "The problem of acute cholecystitis in old age." In December 2015 he held the academic position of "Associate Professor" at the Faculty of

Public Health and Health Care, University "Prof. Dr. Assen Zlatarov". Since 2016 he has been Head of the Clinic of Vascular Surgery at UMHAT Burgas AD.

Assoc. Prof. Vasilev has 36 years of medical experience, and for more than 16 years he has been working as a vascular surgeon, first in MHAT-Kazanlak-EOOD, and then in UMBAL Burgas AD.

1. Research activity

1.1. Publications

The full list of publications attached to the documents contains a total of 112 titles:

• dissertation and abstract on "The problem of acute cholecystitis in old age and old age" and 11 scientific publications used to award the scientific degree "Doctor";

• 25 publications and reports, in journals with scientific review and conference proceedings, 22 participations in scientific forums in the country with international participation and abroad with reports, abstracts, posters and programs and 1 textbook co-authored for participation in a competition for " Associate Professor ";

• 1 independent monograph, 38 scientific publications, 9 participations in scientific forums with reports, abstracts, posters and programs and 2 textbooks.

A total of 41 papers were submitted for the competition, after acquiring the academic position of "Associate Professor":

• 1 habilitation thesis - monograph in Bulgarian entitled "Peripheral atherosclerotic disease in diabetics", 2020;

• 17 scientific publications, referenced and indexed in world-famous databases with scientific information;

• 21 publications and reports published in non-peer-reviewed peer-reviewed journals;

• 1 independent textbook "Handbook of Nurses and Medical Assistants (Practical guide for information on the daily activities of nurses and medical assistants and a guide for students majoring in nursing and medical assistant)", 2020.

• 1 textbook co-authored "Modern methods for diagnosis and treatment of complications of diabetes and innovative approaches to training - Practical guide", 2020

In 39% of the submitted materials for participation in the competition (16), the candidate is an independent or first author.

1.2 Scientific forums

Assoc. Prof. Vasilev has presented a total of 31 participations in scientific forums with published reports or abstracts. 9 of them are after the academic position of "associate professor".

1.3 Authorship and citations

The candidate presents 43 citations to his publications (without self-citations):

• 9 in scientific journals, referenced and indexed in Scopus and Web of Science

• 9 in the monograph

• 25 in unreferred journals with scientific review.

1.4. Specializations

• Specialization in lower endoscopies, ISUL, Sofia, February 1988.

• Specialization in carotid surgery at the University Hospital San Carlo Borromeo, Milan, Italy, September 2002.

• Specialization in laparoscopic surgery at Dupont Hospital, Fort Wayne Indiana, USA, December 2005.

• Specialization in endovascular surgery, Medical University - Sofia - National Cardiology Hospital, February - May 2016.

• Specialization in vascular ultrasound Doppler diagnostics, Thracian University - Faculty of Medicine, Stara Zagora, 2016.

1.5. Membership in scientific organizations

• Member of the Bulgarian Surgical Society

• Member of the Bulgarian National Society of Vascular and Endovascular Surgery and Angiology

• Member of the National Society of Phlebology and Angiology

• Member of the Bulgarian Association of Thoracic, Cardiac and Vascular Surgery

• Member of the Association of Thermal Trauma and Plastic Surgery - Varna

• Member of the Bulgarian Diabetes Association

• Member of the Association of Health Managers in Bulgaria

1.6. Participation in research projects

Assoc. Prof. Vasilev is the head of two research projects at the University - one on the topic "Study of the severity of atherosclerotic changes of peripheral blood vessels in diabetics" and one successfully completed on "Innovative approaches in the training and qualification of health professionals."

1.7. Awards

• Vasilev, V., Sotirova, E., Atanassov, K., Sotirov, S. Intuitionistic Fuzzy Assessments of the Abdominal Aorta and Its Branches. In International Conference on Intelligent and Fuzzy Systems, INFUS 2020, Advances in Intelligent Systems and Computing book series, AISC, vol. 1197, 2020, pp. 26-31. Springer, Cham. Best paper

• Shannon, A., Atanassov, K., Sotirova, E., Vasilev, V. (2020, August). Generalized Net Model for Creating and Evaluating of Educational Content. In 2020 IEEE 10th International Conference on Intelligent Systems (IS) (pp. 517-520). IEEE. Best paper

2. Profile of the research activity

The research work of Assoc. Prof. Vasilev is mainly in the field of vascular pathology. He has more than 20 years of experience in general surgery and more than 17 years of practical experience in the prevention, diagnosis and treatment of vascular diseases. He runs the Clinic of Vascular and Edovascular Surgery, where he has trained two specialists in Vascular Surgery, and currently one doctor is in the process of training.

3. The most significant scientific contributions

Main scientific and applied scientific contributions

The contributions from the publications are presented, grouped by topics, in connection with the author's work in the fields of: diagnosis, surgical treatment and

prevention of peripheral atherosclerotic disease and its complications; diagnosis, treatment and medical and social prevention of diabetes mellitus and leading surgical complications; diagnostics, surgical interventions and medico-social prophylaxis of leading socially significant diseases of the circulatory system, diagnostics, treatment and prophylaxis of diseases of general surgery and social medicine.

I. Scientific contributions in the field of diagnosis, surgical treatment and prevention of peripheral atherosclerotic disease and its complications.

The monographic work on the topic: "Peripheral atherosclerotic disease in diabetes mellitus" is devoted to this issue.

Scientific contributions in this direction are related to the definition and systematization of risk factors leading to pre-diabetic condition. Particular attention is paid to the diabetic foot, which is established as a separate clinical unit and discusses in detail the criteria for diagnosis and treatment of various forms of diabetic foot.

Own algorithms for treatment, care and prevention of diabetic foot have been developed. Particular attention is paid to the diagnosis of arteries in the popliteal segment, which are the predilection site of peripheral atherosclerotic disease (PAD) in diabetics.

The own concept of the close correlation between diabetes mellitus and PAD has been expressed. Significant personal experience in the endovascular treatment of PAD in patients with diabetes mellitus has been shared, with the notion of a more aggressive anticipatory effect in arterial lesions in the popliteal segment.

II. Diagnosis, treatment and medical and social prevention of diabetes mellitus and leading surgical complications.

In this section the researches of the candidate in the field of diabetes mellitus and the severe vascular complications of the limbs caused by it are continued. The establishment of the common pathogenetic mechanism between diabetes mellitus, DVT and CVD, which is expressed in the maintenance of a chronically high level of mediators of inflammation and the development of endothelial dysfunction in both arterial and venous vessels, is of great scientific and scientific-applied contribution (№ 19). Developed own concept on the educational and methodological interpretation of diabetes mellitus and its neurological and vascular complications, as well as the creation of rules for effective prevention, prophylaxis and complex medical and social care of this mass socially significant disease (№ 4, 14, 20, 29 , 30, 31, 32, 33, Textbook 2). The indicated

methods of combined treatment of diabetic foot, contributing to the preservation of the limb and minimizing the degree of disability, are of a contributing nature (№ 17, 41).

III. Diagnosis, surgical interventions and medical and social prevention of leading socially significant diseases of the circulatory system.

For the first time, mathematical models of the arterial blood supply of the lower and upper limbs, and of the cardiovascular system as a whole have been developed through the theory of generalized networks, and on this basis vascular diseases related to circulatory disorders can be modeled. An innovative approach has been proposed through fuzzy estimates to more accurately determine the degree of patency of the aorta and arteries in acute and chronic thrombosis (№ 1, 2, 7, 8, 11).

Rare congenital pathoanatomical variants of the popliteal artery are considered and original and rarely applied tactical solutions in its treatment are proposed (№ 27).

The proposed tactical approaches in transluminal angioplasty for revascularization of the peripheral arteries and the derived algorithm for early prevention of complications of the diabetic foot are contributing (№ 3, 26, 37, 42, 43, 44).

The elaboration of the problem with the late search for specialized medical care in patients with acute arterial diseases in the elderly and senile age, as well as the proposed tactical algorithm in the surgical treatment of multistory thrombosis of the arteries of the lower extremities are interesting from an applied and scientific point of view (№ 16, 35, 39, 40).

The presented own concept of diabetes as an independent risk factor for the occurrence and development of venous thromboembolism confirms the thesis about the proinflammatory nature of diabetes mellitus (№ 23, 27).

IV. Diagnosis, treatment and prevention of diseases of general surgery and social medicine.

The problems in complicated forms of colorectal cancer, especially in elderly and elderly patients, are considered and the ways for their successful surgical treatment are indicated. Modern approaches have been used for analysis, research and surgical treatment of malignant neoplastic diseases (№ 9, 12, 13, 15).

The use of telemedicine as an innovative and original methodology for diagnosis and treatment of socially significant diseases in a pandemic by COVID-19 (№ 5) is of a contributing nature.

An own model for assessment of the public health system with statistical data for the period 2010 - 2018 has been developed and a population survey has been conducted in the Burgas region on the quality of life related to health (№ 6, 10).

The analysis of the working relations between the participants in the medical-diagnostic process and the proposed models of behavior of doctors and nurses in order to improve the quality of medical activities deserves attention (Study Guide 1).

The creation of innovative and unique chitosan-zeolite nanocomposite films for the local treatment of infected wounds of vascular origin has a significant scientific and applied contribution (-24, 25).

4. Teaching and research-organizational activity

Assoc. Prof. Vasilev won a competition for Chief Assistant in May 2012. Since December 2015, he has been appointed to the academic position of "Associate Professor" of Surgery. His teaching activity is related to giving lectures and conducting practical exercises in the process of training students at the University and specialists in vascular surgery Clinic of Vascular and Endovascular Surgery at UMHAT Burgas AD. The average annual study employment is about 230 hours at a standard of 180 hours. The study workload of Assoc. Prof. Vasilev meets the requirements for workload for holding the academic position of "professor".

Assoc. Prof. Vasilev is the supervisor of two doctoral students - one currently in defense at the Thracian University - Stara Zagora and one successfully defended at the Medical University - Sofia in 2016.

5. Diagnostic and therapeutic work

Assoc. Prof. Vasilev has 36 years of experience as a doctor, of which 10 years he works as an assistant, chief assistant and associate professor of surgery. In his clinical practice he uses many innovative diagnostic and treatment approaches by working in close cooperation with his colleagues from the departments of vascular surgery, interventional cardiology and neurology, not only in UMHAT-Burgas AD, but also with all hospitals in Burgas. This is a condition for applying a multidisciplinary approach in the treatment of patients and achieving optimal results.

Assoc. Prof. Vasilev meets the minimum national requirements and the Regulations for the terms and conditions for obtaining scientific degrees and holding

academic positions at the University "Prof. Dr. Asen Zlatarov "- Burgas to hold the academic position of" professor "and with a minimum of 670 points he collects 1371.54.

Conclusion

Based on the analysis of the scientific activity and activity, of the teaching and treatment activity and of the scientific contributions, it becomes clear that Assoc. Prof. Valentin Vasilev is a serious and thorough scientist, lecturer and doctor with extensive experience in the field of vascular diseases.

I believe that Assoc. Prof. Dr. Valentin Konstantinov Vasilev, MD meets all the requirements of ZRASRB, the Regulations for its implementation and the Regulations on the terms and conditions for obtaining scientific degrees and holding academic positions at the University "Prof. Dr. Asen Zlatarov "- Burgas. I propose to the esteemed scientific jury to be awarded the academic position "PROFESSOR" in the field of higher education 7. "Health and Sports", professional field 7.1. "Medicine" and scientific specialty "Vascular Surgery" for the needs of the Faculty of Public Health and Health care "University" Prof. Dr. Asen Zlatarov ", Burgas.

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Varna

Prepared the review:

(Prof. Veselin Petrov, MD)