

TO THE CHAIRMAN OF THE SCIENTIFIC
JURY AT THE MEDICAL UNIVERSITY
"PROF. DR. PARASKEV STOYANOV"-
VARNA

STANDPOINT

by

Assoc. Prof. Dimitar Petkov Petkov, MD, PhD

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on the dissertation of:

"Modern surgical approach in vascular
access for haemodialysis'

Martina Sasheva Sapundzhieva-Nikolova, MD

PhD student in Doctoral Program "Vascular Surgery" at

Department of Cardiovascular Surgery and Angiology

Medical University "Prof. Paraskev Stoyanov"-Varna

for the award of an educational-scientific degree "Doctor" in the field of

higher education 7. Health and sports

professional field 7.1 Medicine and scientific specialty "Surgery"

Scientific supervisor: Prof. Veselin Petrov Petrov, MD, PhD

According to a decision for the composition of the Scientific Jury, appointed by an order of the Rector of the Medical University "Prof. Paraskev Stoyanov"-Varna No P-109-265 / 23.05.2023, Regulations for the Application of the Law on the Development of Academic Staff in the Republic of Bulgaria and the Rules for the Development of Academic Staff at the Medical University of Varna I am presenting this standpoint.

The presented dissertation of Martina Sasheva Sapundzhieva-Nikolova, MD consists of 144 standard typewritten pages. Its structure includes the necessary sections as follows:

Contents – 3 pages

Abbreviations used - 2 pages

Introduction - 1 page

Literature review - 45 pages

Purpose and tasks - 1 page

Material and method - 7 pages

Own results - 33 pages

Discussion - 21 pages

Conclusions - 1 page

Contributions - 1 page

Literature - 27 pages

List of publications related to the dissertation-1 page

The dissertation work is illustrated with 30 tables and 34 figures. The list of cited literature includes 272 titles, of which 10 in Cyrillic and 262 in Latin.

On the topic of the dissertation, the doctoral student has published two publications in 2020.

Biographical data

Martina Sasheva Sapundzhieva-Nikolova, MD was born on 09.09.1985 in Varna. He graduated with honors from the Third High School of Mathematics and Natural Sciences "Acad. Metodiy Popov" – Varna in 2000. In 2010 she graduated in medicine from the Medical University "Prof. Dr. Paraskev Stoyanov" – Varna. She acquired a specialty in "Vascular Surgery" in 2018. From 2011 to 2013 she worked at the Clinic of Surgery at the Hospital "St. Anna" Varna. From 2012 to 2018 she was a part of the medical staff of the Vascular Surgery Clinic at the Hospital "Sv. Anna." Since 2019 so far, she has been working as a vascular surgeon at the Vascular Surgery Clinic, University Hospital "Sv. Marina" Varna, as of 2020 she is an assistant at the Medical University.

The dissertation work

is dedicated to an extremely current and socially significant topic. Ensuring of appropriate and long-term vascular access is crucial to the possibility of conducting vital hemodialysis. Patients requiring hemodialysis are growing annually. Surgical methods occupy a leading tool in providing hemodialysis access. The problem is related to improving the choice and efficiency of surgical vascular access. Preoperative preparation is constantly being improved worldwide to create a suitable haemodialysis pathway. In our country there is no complex study of risk factors, preoperative selection in providing reliable vascular access.

The literature review is an in-depth analysis of the relevant publications on the topic of the dissertation.

The aim of the dissertation is defined clearly and precisely – to study and refine the optimal approach in patients on hemodialysis to create functional arteriovenous access. Six tasks have been defined.

The study includes 85 patients with established surgical vascular access for hemodialysis for the period from 2016 to 2021. Patients are divided into two groups according to the scale of preoperative preparation. The distribution by age, gender, type of surgical vascular access, concomitant diseases, preoperative training, type of complications is analyzed. Imaging consists of color-coded duplex sonography and computed tomography assisted angiography.

The own results are presented in six chapters. A comparative analysis of the two groups of patients is performed by gender, age, comorbidities and type of surgical vascular access. An assessment of the preoperative preparation is carried out, including physical examination and diagnostic imaging methods. Complications are occurred by type and time of occurrence. The role of postoperative antiplatelet therapy towards the incidence of complications has been studied. A complex assessment of the influence of various factors on the patency of vascular access is carried out.

The discussion is structured in 11 points which follow the own results. Own results are compared with the cited world publications.

The dissertation ends with seven conclusions and five scientific-practical contributions. The role of preoperative preparation in refining the selection and subsequently success rate of arteriovenous hemodialysis access is emphasized.

The presented auto abstract fully meets the requirements by accurately and well presenting the content of the dissertation.

I believe that the dissertation submitted for opinion on "Modern surgical approach in vascular access for hemodialysis" is an original work of the author and distinguished by accuracy, credibility and comprehensiveness. The dissertation can be defined as a contribution to the research and practical clinical activity in vascular surgery and is the basis for subsequent studies in this field. The PhD student Martina Sasheva Sapundzhieva-Nikolova

has solid theoretical knowledge and professional skills in vascular surgery and with the presented dissertation proves that she can conduct complex scientific studies independently.

Based on the findings, I give a completely positive assessment of the dissertation and would like to propose to the distinguished members of the Scientific Jury to award the scientific and educational degree "Doctor" to Martina Sasheva Sapundzhieva-Nikolova.

13.07.2023
Stara Zagora


Assoc. Prof. Dimitar Petkov Petkov, MD, PhD