

OPINION

by Prof. Plamen Stoyanov Bozhinov, MD, DSc
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on the dissertation of

Dr. RADINA SVETLOZAROVA FUCHIDZHIEVA

for obtaining the educational and scientific degree "Doctor"

in the scientific specialty 03.01.19 "Neurology" on the topic:

**"PROGNOSTIC MARKERS FOR RECOVERY OF APHASIA AFTER ACUTE
ISCHEMIC STROKE"**

In Order № P-109-485/18.11.2021 of the Rector of MU-Varna and protocol №1 / 25. 11.2021 I present an opinion of dissertation work of Dr. Radina Svetlozarova Fuchidzhieva, PhD student in full-time form of education in the doctoral program "Neurology", enrolled by order №P-109-255 / 01. 08. 2019 at the Department of Nervous Diseases and Neurosciences of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna, on the topic: "Prognostic markers for recovery of aphasia after acute ischemic stroke" for obtaining the educational and scientific degree "Doctor".

Education, qualification and specializations. Dr. Radina Fuchidjieva was born on July 11, 1989. In 2008 she graduated from the High School of European Languages "St. Constantine - Cyril the Philosopher" in Ruse. In 2014 she graduated medicine at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna, since 2020 she has acquired a specialty in neurology.

Career development. The professional pathway of Dr. Radina Fuchidzhieva is as follows: since 2015 she is a resident in neurology at Second Clinic of Nervous Diseases, University Hospital "St. Marina" - Varna, since 2017 she is an assistant at the Department of Nervous Diseases and Neuroscience "of MU - Varna, from 2020 - until now works as a neurologist at the Second Clinic of Nervous Diseases, University Hospital" St. Marina" - Varna

Publications, citations, scientific activity. Dr. Fuchidzhieva provides data for 3 (three) scientific publications in Bulgarian on the topic of the dissertation. In two of the presented publications, which are literary reviews, Dr. Fuchidzhieva is the first author, and in the third she is the third author.

The dissertation of Dr. Radina Fuchidzhieva shows that the candidate has in-depth theoretical and practical knowledge in the field of neurology and ability for independent research in the field of neuroscience. It is dedicated to the field of neurology related to prognostic markers for recovery after one of the most disabling symptoms after an acute ischemic stroke. The correlations between the possibilities for recovery of aphatic disorders and the performed treatment of ischemic stroke were studied.

Volume and structure. The dissertation of Dr. Fuchidzhieva is structured according to the standards adopted in our country for obtaining the scientific and educational degree "Doctor" and is presented in a form and volume corresponding to the specific requirements of the primary unit. Its volume includes 156 standard pages and contains: title - 1 page, content - 2 pages, abbreviations used - 2 pages, introduction - 2 pages, literature review - 46 pages, purpose, tasks and hypotheses - 2 pages, material and methods - 4 pages, own results - 42 pages, discussion - 7 pages, conclusion - 4 pages, conclusion remarks - 1 page, contributions - 1 page, list of publications and scientific events related to the dissertation - 1 page, literature - 28 pages, appendices - 12 pages. The dissertation includes 55 figures and 3 tables. The bibliography contains 291 titles, 12 in Cyrillic and 279 in Latin.

The literature review is well structured and is written analytically on 39 pages. The used literature is up-to-date and includes 291 titles, more than 60% of which are from the last 5 years. It includes eight parts and concludes with a critical analysis of the literature. The clear presentation of the latest developments in the identification and prevention of risk factors for ischemic stroke, as well as the causes of aphasia and its frequency, classification and scales for assessing aphasia is very impressive. There is only one figure in the literature review and there is no illustration (tables, graphs), which would help for more easily perceive certain literature data.

The aim is well-formulated to study the diagnostic and prognostic significance of aphatic disorders in patients with acute ischemic stroke with and without thrombolysis and to determine the prognostic markers for recovery of aphasia in both groups.

The tasks are 6. The first and second tasks concern the clinical characteristics of patients with ischemic strokes who have passed through the First and Second Clinics of Nervous Diseases of the University Hospital "St. Marina" - Varna for the period 2020-2021 includes the frequency of risk factors in the presence of aphatic disorders. The next three tasks relate to the analysis of changes in the brain parenchyma in patients with aphasia with / without thrombolysis through the ASPECTS scale; study of the model of recovery in some types of aphasia and search for correlations between the recovery of aphatic disorders depending on the treatment and the change in motor deficit, assessed using the NIHSS scale. The last task shows a profile of the patient for the outcome of the disease depending on the studied indicator.

Clinical contingent and methods. Dr. Fuchidzhieva used a clinical contingent of 67 patients with ischemic stroke in the territory of the left middle cerebral artery, divided into two groups: 17 patients treated with thrombolysis (clinical group) and 50 without thrombolysis (control group), passed through the First and Second Clinics of Nervous Diseases at the University Hospital "St. Marina" - Varna for the period January 2020 to July 2021. Patients are selected according to specific criteria for inclusion. The observation time is short and the number of evaluated patients is small in volume, but in my opinion they are sufficient enough in order of the specific clinical contingent, for a dissertation for the educational and scientific degree "Doctor". The methods used, and in particular the four specific scales, are adequate and provide a reliable basis for reliable results.

The results are presented according to the individual criteria for the distribution of the clinical contingent and are well illustrated by 3 tables and 55 figures. Statistical methods are selected and used correctly.

Discussion and conclusion. Own results are critically discussed on 7 pages (discussion) and 4 pages (conclusion) in view of modern scientific research in this field and their value for clinical work.

The conclusion remarks are 6 and synthesize the results obtained by the author.

The contributions (3 with original character and 4 with confirmatory character) are well formulated and are sufficient for the volume of the dissertation and the set tasks.

In conclusion, the presented dissertation of Dr. Radina Svetlozarova Fuchidzhieva on "Prognostic markers for recovery of aphasia after acute ischemic stroke" is original and relevant, contains significant scientific contributions and meets the criteria for obtaining the educational and scientific degree "Doctor".

31.01.2022

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