

# OPINION

From

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About

Defense of the dissertation of  
Dr. Stefani Mariyanova Todorova

On the topic:

“Endoscope – assisted evacuation of chronic subdural hematomas”

Presented for the award of  
Educational and scientific degree “Doctor”  
In the scientific specialty “Neurosurgery”  
Professional field 7.1. Medicine  
Area of higher education 7. Health and sports

### **Brief biography of the author:**

Dr. Stefani Mariyanova Todorova was born in Razgrad in 1992. In 2011 She graduated from the "Konstantin Preslavski" highschool of Varna with excellent results. In 2017 graduated from the Medicine specialty at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna. After her graduation, she was appointed to the Neurosurgery Clinic at "Sveta Marina" UMBAL EAD - Varna as a physician. From 2018 is a resident, and since 2019 is a doctoral student at the Department of Neurosurgery and ENT Diseases at the Medical University - Varna. From 2020 is an assistant at the Department of Neurosurgery and ENT Diseases of the Medical University - Varna.

Over the years, as a medical student, she was enrolled as a demonstrator at the Department of Neurosurgery and ENT Diseases, MU - Varna.

### **Relevance of the topic:**

The dissertation work "Endoscope - assisted evacuation of chronic subdural hematomas" by Dr. Stefani Mariyanova Todorova examines an extremely significant problem of medical care in our country for the treatment of patients with chronic subdural hematomas. On a global and national scale, their number is increasing due to several main factors - the aging of the population in combination with the widespread use of anticoagulants and/or antiplatelets. This problem represents a serious challenge to public health care in the country, as it is also related to the growing requirements and technological possibilities for treatment and care of patients.

### **Characterics and evaluation of the dissertation:**

The dissertation work contains 115 pages, including 3 tables, 37 figures, and 15 photographs. 201 literary sources are cited, of which 3 are in Cyrillic and 198 are in Latin.

The literature review takes up 42 pages, is well laid out and structured. It shows the doctoral student's excellent knowledge of the topic, systematicity and wide scope of the issues under consideration. The in-depth review of the literature on the topic by leading domestic and foreign authors and documents reveals the essence and significance of the researched problem.

The seven tasks set are specific, realistic and relevant to the goal. A hypothesis was formulated, which is the starting point of the dissertation work, considering the endoscope-assisted evacuation of chronic subdural hematomas - as a safe and effective method for patients, including those in the elderly. The method is a minimally invasive surgical treatment with a favorable outcome of the disease. The research is retrospective in nature and was conducted for the period 2011-2021. The presented material is reliable, convincing and sufficient for the logically presented results and general conclusions. A detailed statistical analysis of the obtained results was performed. The data obtained from the present study show that 11.9% of patients with cSDH reported alcohol use, and 17.7% of those taking anticoagulants. Patients with hematological diseases are 4.6%, which are characterized by a long hospital stay, a complicated clinical picture and, in most cases, a fatal outcome. The obtained results and their discussion fully correspond to the formulated hypothesis, goal and tasks of the doctoral student, and the analysis of the presented results gives the opportunity to logically reach the conclusions. Six general conclusions are formulated, which follow correctly and logically from the analysis of the results. The conclusions are specific, but at the same time comprehensive and reflect the most important conclusions obtained from the research.

The scientific work is well structured, written in the standard academic style of presentation, clear and specific. From the presentation of the literature review, the tasks set, the results obtained and the conclusions drawn, the author's ability to chronologically and consistently follow the problems of the scientific topic and logically analyze the obtained data is evident.

Related to the dissertation, the doctoral student Stefani Mariyanova Todorova presents a publication in which she is the lead author. The publication was printed in a specialized international edition in English: Todorova S: Endoscopically – assisted evacuation of chronic subdural hematoma – new gold standart?, International Bulletin of Otorhinolaryngology. 3/2022, 10-13

### Original contributions

- A thorough characterization of patients with chronic subdural hematoma was made, risk factors were assessed and deduced, and a risk profile of the patient was created.
- The effectiveness of the neuroendoscope-assisted evacuation of a subdural hematoma has been proven.
- The indications and contraindications for the application of neuro-endoscope-assisted evacuation of subdural hematoma are formulated
- A protocol for intraoperative application of an endoscope in neurosurgical surgical treatment of chronic subdural hematomas was developed and introduced in the Neurosurgery Clinic of UMBAL "St. Marina", city of Varna as a routine method of surgical treatment.
- The recommendations for the intraoperative use of an endoscope in the neurosurgical treatment of patients with chronic subdural hematomas have been formulated.

### Abstract

The abstract meets the requirements and reflects the main results achieved in the dissertation. It is developed in a volume of 56 pages, illustrated with figures and tables. Correctly structured, written in clear and precise language fully reflects the issues and conclusions developed.

As a conclusion, I would like to add that the doctoral student Dr. Stefani Mariyanova Todorova has the required theoretical training, knowledge and professional skills to independently conduct scientific research, which is available through the present scientific work.

Given the successful professional development of Dr. Stefani Mariyanova Todorova, her publication activity, teaching activity and the presented dissertation "Endoscope - assisted evacuation of chronic subdural hematomas" applicable in clinical neurosurgical practice in the field of higher education 7. "Health and sports" by professional direction 7.1 "Medicine" and scientific specialty 03.01.41. "Neurosurgery", which fully complies with the requirements of the ZRASRB (the Bulgarian law of academic development), the Regulations for its application and the Regulations of the Medical University "Prof. Dr. Paraskev Stoyanov" Varna, I confidently propose to the respected Scientific Jury to award the educational and scientific degree "Doctor" to Dr. Stefani Mariyanova Todorova, in the doctoral program in "Neurosurgery" and I vote positively!

Sofia,

125.04.2023

Assoc. Prof. Dr. Vladimir Stefanov Nakov MD

