

## STATEMENT

From: art.-cor. Prof. Dr. Nikolay Gabrovsky, MD, Head of Neurosurgical Department, UMBALSM "N.I. Pirogov" - Sofia.

Regarding: the dissertation work of Dr. Lili Naskova Laleva, neurosurgeon at the Neurosurgery Clinic of "Acibadem City Clinic UMBAL Tokuda" EAD, on the topic of "Minimally invasive extended lateral orbital approach for intraorbital and intracranial pathology", for educational and scientific degree "Doctor of Philosophy" in scientific specialty Neurosurgery, code 03.01.41 in professional direction 7.1. Medicine, field of higher education 7. Health care and sports.

Scientific supervisor: Assoc. prof. Dr. Vladimir Stefanov Nakov, MD.

The procedure was announced by order No. 15-03-392-1 dated 18.11.2022 of the Executive Director and Procurator of "Acibadem City Clinic UMBAL Tokuda" EAD.

Dr. Lili Naskova Laleva was born in 1985. in Sofia. She graduated from the First English Language High School in 2004. In 2010 she graduated as a Master of Medicine at the Faculty of Medicine of the Medical University - Sofia, with excellent results. In 2016 graduated as a Master in Health Management at Sofia Medical University. She acquired a specialty in neurosurgery in 2017. In 2018 she successfully passed the exam of the European Association of Neurosurgery (EANS).

During her studies and specialization, Dr. Lily Laleva has participated in numerous clinical internships, educational courses and seminars, in prestigious neurosurgery clinics in Europe and all over the world.

Dr. Lili Laleva has participated in the author team of 26 scientific publications in Bulgarian and foreign medical journals, in one chapter of a textbook and in 56 reports at local and international scientific forums. She participated in 5 research projects.

Dr. Lili Laleva is a member of the Bulgarian Society of Neurosurgery, the European Association of Neurosurgical Societies and the European Society of Minimally Invasive Neurological Therapy (ESMINT). She is proficient in English at B2 level; Italian language at B2 level; German language at level B2; Spanish language at level B1.

The dissertation of Dr. Lili Naskova Laleva is on the topic: "Minimally invasive extended lateral orbital approach for intraorbital and intracranial pathology". The topic is relevant, with a practical focus and addresses a problem that is challenging, interdisciplinary and of particular interest. The scientific work is presented on 158 pages, contains 32 figures, 6 tables and 10 diagrams. The bibliographic reference consists of 249 titles, of which 11 are Bulgarian. The structure is well balanced and compliant with the standards.

The literature review is on 13 pages and examines in detail, in historical and comparative terms, the lateral orbitotomy, the development of approach over time and its influence by various technological innovations. Relevant nowadays main unsolved problems are also synthesized.

Based on this, the goal is formulated - to study and describe the anatomical and clinical application of extended lateral orbital approach as a minimally invasive anterolateral approach in neurosurgical practice in surgical interventions for tumor and vascular intracranial pathology, followed by 7 tasks.

The research method includes two parts: a descriptive anatomical study and a prospective clinical study. The anatomical part was conducted in the specialized dissection room of the Laboratory of Neurosurgical Anatomy (LSNA), from the Department of Anatomy and Embryology at the Medical University of Barcelona. The clinical study was conducted at the Neurosurgery Clinic of Acibadem CityClinic UMBAL Tokuda EAD and included 160 patients, of whom extended lateral orbital approach was applied to 42, and the remaining 116 were a control group.

Numerous anatomic parameters related to lateral orbital approach and its variations, the various anatomic corridors, and the approach to neural and vascular structures they provide were analyzed. The significance of the use of microscopic and endoscopic techniques is analyzed. Numerous qualitative and quantitative indicators related to the intervention and the clinical course were examined in detail. Based on this, 8 conclusions are formulated. The findings are important and of high practical value to any surgeon planning such approaches. The contributions of the dissertation work are 8: two of a scientific-theoretical nature, two of a methodological nature and four of a scientifically applied nature.

There are 7 publications related to the dissertation, of which 3 are in English.

Presentations at congresses are 5.

In conclusion, the dissertation work of Dr. Lili Naskova Laleva: "Minimally invasive extended lateral orbital approach for intraorbital and intracranial pathology" is on important topic, relevant to modern neurosurgery. The study was done extremely consistently, systematically, with a wide range of scientific methods, with a detailed and versatile approach to the problems, with correlation of data and results from the section and from the operating room, which determines its high scientific value.

Based on the above, I find that the dissertation of Dr. Lili Naskova Laleva: "Minimally invasive extended lateral orbital approach for intraorbital and intracranial pathology", has the necessary qualities and meets all the criteria for the educational and scientific degree "Doctor of Philosophy".

30.12.2022

Sofia



(N. Gabrovsky)