

OPINION

by

Prof. Dr. Dobrin N. Konstantinov, MD, PhD

external member of the Scientific Jury,

for the PhD thesis of Dr. Radka Tsokova Maslarska titled:

„HEMANGIOMAS OF INFANCY AND IN EARLY CHILDHOOD - INNOVATIVE TREATMENT AND FOLLOW-UP”

Field of higher education - 7. Healthcare and sports, professional direction:

7.1. Medicine, Doctoral Program "Dermatology and Venereology"

Biographical data of the PhD student

Dr. Radka Tsokova Maslarska graduated from Medical University -Pleven with a master's degree in medicine in 1986. She has worked as a neonatologist at Lovech General Hospital in the period 1987-1992. From 1992 to 1995 she has been the Head of the Department for Premature Children at "Georgi Stranski" University Hospital, Pleven. For 10 years (1995-2005) he has been a doctor in the Neonatology Clinic at Sofia Children's Hospital, after which for one year (2005-2006) she was the Head of the Department of Neonatology at the Second Municipal Hospital, Sofia. From 2006 she is the Head of the Department of Neonatology at "Acibadem City Clinic Tokuda University Hospital".

Dr. Maslarska acquired specialties in Pediatrics and Neonatology. She holds a diploma in Healthcare management. Participated in numerous international and national congresses in the field of Neonatology, Pediatrics, OG. She has vast experience in clinical trials as a participant in scientific teams and many publications in the specialized press. She has established authority and possesses high professionalism in the field of neonatology and children's diseases.

Significance of the topic

„Hemangiomas of infancy and in early childhood -innovative treatment and follow-up" as a title choice is appropriate and relevant for a dissertation thesis. As the most common benign vascular tumors in early childhood, hemangiomas create, on an individual basis for each affected child, varying degrees of medical, cosmetic and psychological challenges. The development of therapeutic approaches in recent decades, and especially the introduction of new more effective products that successfully replace the aggressive treatment methods of the past, requires a reassessment of behavior and the adoption of

modern diagnostic and therapeutic algorithms.

PhD thesis structure

The submitted dissertation work contains 151 standard typewritten pages. The introduction and literature review are set out in 50 pages; purpose, tasks, materials and methods occupy 5 pages; results and discussion - 60 pages, conclusions, recommendations and contributions - 5 pages, literature sources - 19 pages. Included are 4 appendices containing information materials, official forms and additional results from this thesis. The text is illustrated with 32 tables and 80 figures.

The literature review is comprehensive and includes 163 sources, of which 3 in Cyrillic and 60 in Latin. The information in it is up-to-date, with over 80% of the publications being from the period after 2010, when, in reality, the most significant change in the treatment of hemangiomas occurred with the introduction of beta-blockers. The review itself is well structured on topics that allow a detailed introduction to the essence of vascular anomalies and hemangiomas, in particular.

Goal and tasks

The PhD student aims to conduct a retrospective analysis of propranolol-treated children with hemangiomas and create an exemplary standard scheme of therapy and follow-up, as well as its introduction into practice in Bulgaria. Formed in this way, the goal unites several sub-goals, albeit in one direction. Some overlap was allowed with the identified six tasks, which focus on analyzing factors in determining the correct therapy; clinical characteristics of observed patients; analysis of the side effects that have occurred; determining the need for continued treatment/relapse; tracking algorithm development; analysis and assessment of treatment success; formulation of recommendations and behavior in patients undergoing treatment with propranolol.

Material and methods

276 children were included in the study, all observed in the period from May 2018 to December 2021. They were treated or observed in various bases of "Ajibadem City Clinic Tokuda" such as Department of Neonatology, Clinic of Dermatology, Clinic of Angiology, Children's surgery room and Children's ophthalmology room, "Tokuda" Medical Center. Age at initiation of treatment ranged from 2 months to over 1 year. Follow-up spanned a minimum of six months, in case of some patients over one year. The analytical methods are selected according to the purpose and tasks, include appropriate statistical methods and are processed with the specialized package SPSS.

Results and discussion.

In the report and the attached tables individual characteristics of the patients are described in detail, as well as data summarized by various indicators are presented, in a suitable form for statistical processing. Dr. Maslarska presents the results of her research in a systematized form and with appropriate visualization in figures and tables. It shows the PhD student's personal attitude and shared her own clinical experience, especially in the detailed description of individual clinical cases. Dr. Maslarska discusses the data she has obtained in detail in this section and moves on to her final conclusions and recommendations.

Contributions and recommendations

I support the contributions made by the PhD students, especially since they are based on the most up-to-date and comprehensive development on the topic of a dissertation at the moment in Bulgaria. All of them are corroborating data from international experience, which does not detract from the achievement of the dissertation, based on the still short period for accumulating experience and the possibility of final conclusions. Some of the contributions and fundamentals for a future systematic approach in the specific field. The recommendations derived from the dissertation thesis have a methodological and practical strategic importance for the behavior of hemangiomas in early childhood in our country.

Author's abstract

The Author's abstract is written on 67 pages, and in terms of form and content it meets the requirements and gives a clear idea of the essence of the dissertation work. Dr. Maslarska has 3 publications on the subject, two in Bulgarian journals and one in English in a journal with an impact factor.

Remarks and recommendations

The layout of the PhD thesis deserves a good evaluation in terms of language and graphics. In structuring the paper, the dissertation author has separated out a significant portion of the results, including in combination with many of the considerations that are more appropriately set out in the discussion section. Thus, the following comment and discussion section, again titled "Results," contains relatively few generalizations and is more focused on recommendations and a proposed behavioral algorithm. The individual clinical cases presented contain valuable information and would be more appropriate to separate and, without losing their informative value, form an additional appendix to the text for reference.

The above-mentioned remarks, however, do not change the final value of Dr. Maslarska's work, that is why it can be evaluated positively.

In conclusion, on the basis of the above mentioned, I consider that the dissertation meets the requirements of the regulatory framework and I would recommend the respected Scientific Jury to award **Dr. Radka Tsokova Maslarska** the scientific and educational degree "**Doctor**".

Sofia, 23.06.2020 г. :