

To the Scientific Jury,
determined by Order No. 19-339/13.06.2023,
of the Executive Director of
"Ajibadem City Clinic UMBAL Tokuda" EAD, Sofia

OPINION

by dr.Boryana Emanuilova Avramova, MD, PhD,

from the Department of Pediatrics of Medical University – Sofia, an external member of the Scientific Jury, determined by order No. 19-339/13.06.2023, of the executive director of "Ajibadem City Clinic UMBAL Tokuda" EAD, Sofia

Regarding the dissertation work of Dr. Radka Tsokova Maslarska, doctoral student of independent training, on the topic "Hemangiomas in infancy and early childhood - innovative treatment and follow-up", for the acquisition of the educational and scientific degree "doctor" in the doctoral program "Dermatology and Venereology".

The submitted materials for the procedure meet the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria and the Regulations for the Development of the Academic Staff of "Ajibadem City Clinic UMBAL Tokuda" EAD, Sofia for awarding the educational and scientific degree "Doctor".

The dissertation is written on 156 standard pages and includes 32 tables, 80 figures and 4 appendices. The bibliographic reference contains 163 titles, of which 2 are in Cyrillic and 161 are in Latin.

Actuality of the scientific topic

The selected scientific topic is dedicated to the most common benign vascular tumors in childhood, their specific characteristics in infancy and early childhood, and new approaches in the treatment and follow-up of patients. In Bulgaria, no such complex study of hemangiomas in early childhood has been conducted in terms of epidemiology, clinical features, criteria for severity, and results of the treatment of these patients according to the modern protocols. The presented dissertation work is the first attempt at such a study, with practical significance for the

treatment and follow-up of the patients, and has a significant contribution to the Bulgarian medical literature.

Evaluation of the literature review

The literature review is sufficiently detailed, competently designed and based on 90 cited sources. Of them, 2 are by Bulgarian authors and 88 by foreign authors; 49 are from the last ten years, which is the proof of the relevance of the scientific problem and the good awareness of Dr. Maslarska in all its aspects. The structure of the review correlates with the set goals and objectives. Detailed literature data on the epidemiology and risk factors for the development of hemangiomas, their modern classification, methods of diagnosis, indications for treatment, and modern therapeutic approaches and methods are presented. At the end of the literature review, the prerequisites for the scientific research of the dissertation work are presented.

Aim and tasks

The purpose of the dissertation is precisely formulated. For its implementation, 6 clearly formulated tasks have been set, and the stages of the study follow their implementation.

Materials and Methods

The presented study is on 276 patients treated for hemangiomas, aged 2 months up to 1 year at diagnosis and treatment. The number of patients is sufficient for statistical processing of the data with reliability of the results. The patients were presented according to the etiological factors for the appearance of the hemangiomas, location, number, type and severity of the hemangiomas, and the criteria for the start of the treatment. Clinical, laboratory and imaging methods were used for diagnosis. All applied therapeutic methods are also described, with the greatest attention being paid to new therapeutic agents, including Propranolol. The statistical analysis methods used in the study are also described in detail.

Results and Discussion

The results obtained, after the statistical analysis of the data, are described in detail in the chapter "Results of the own study". They are divided into subsections that follow the tasks of the dissertation work, and in each of them the results for the patients are presented, incl. specific patients illustrated with photos to confirm the treatment results.

The discussion of the results is competent and very detailed. They are analyzed and compared with the data from the literature. Recommendations based on own experience are also formulated for the treatment of patients with Propranolol. An algorithm was developed to track these patients. 11 conclusions were drawn in full accordance with the obtained data, which correspond to the set goal and tasks. Also presented are 6 recommendations to medical specialists and institutions for the treatment and follow-up of infants and young children with hemangiomas.

Dissertation Contributions

Overall, the dissertation is a significant contribution to enriching our knowledge about the diagnosis and modern treatment of small children with hemangiomas. The dissertation student has indicated 11 contributions, of which 5 have a methodological significance and 6 have a practical and applied significance. I accept all the mentioned contributions, I have a recommendation to specify them further, in order to avoid the repetition of some of them. I also recommend that the description of the clinical cases be separated in a special appendix, in order to preserve the scientific and academic spirit of the dissertation work.

The results of Dr. Maslarska's research work are reflected in 3 publications. In all the dissertation student is the first and only author, proof that the dissertation work is her own work.

Conclusion

In conclusion, I believe that the presented dissertation work is up-to-date, with a significant theoretical and applied contribution to pediatrics, neonatology and dermatology. In terms of structure, content and volume, it meets the criteria of the RSARB and the rules for its application of "Ajibadem City Clinic UMBAL Tokuda" EAD, Sofia, for ONS "Doctor".

I recommend to the respected members of the scientific jury to vote for awarding the scientific and educational degree "Doctor" to Dr. Radka Tsokova Maslarska.

19.05.2023

Prepared the opinion:

/Assoc. Dr. Boryana Emanuilova Avramova/