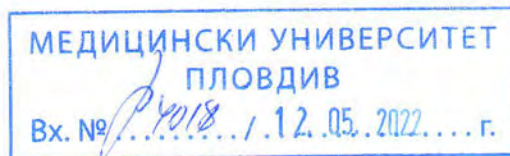


## REVIEW

By



Prof. Hristo Ivanov Shivachev, Ph.D.

of the dissertation submitted for awarding the educational and scientific degree 'Doctor'

professional field Medicine

doctoral program Pediatric Surgery

**Author:** Dr. Dimitar Angelov Dachev

**PhD form:** Self-study.

**Department:** Propaedeutics of Surgical Diseases, Department of Pediatric Surgery

**Subject:** Vacuum-assisted technology for the treatment of wounds in children.

**Supervisor:** Assoc. Prof. Dr. Evgeniy Moshekov, Ph.D.

Head of the Department of Propaedeutics of Surgical Diseases

Assoc. Prof. Dr. Elean Zanzov, Ph.D.

Head of PVH Clinic

### 1. General presentation of the procedure and the doctoral student

The presented set of materials on paper / electronic media is in accordance with Article 70 (1) of Section I. Acquisition of educational and scientific degree "DOCTOR" and scientific degree "DOCTOR OF SCIENCE" at MU-Plovdiv; Regulations of MU-Plovdiv from 28.01.2021 and includes the following documents:

- Application to the Rector of MU-Plovdiv for disclosure of the procedure for defense of the dissertation
- CV in European format with the signature of the doctoral student
- notarized copy of the diploma of higher education
- orders for enrollment in doctoral studies, interruption of studies (due to maternity) and for continuation of studies; for deductions with the right to protection

- an order for conducting an examination from the individual plan and a respective protocol for passing an exam or a doctoral minimum in the specialty

- Minutes of the Department Council for preliminary discussion of the dissertation work and the decisions taken for opening the procedure and for the composition of the scientific jury

- dissertation work

- sentences

- list of scientific publications on the topic of the dissertation

- copies of scientific publications

- list of participations in scientific forums

- list of noticed citations

- declaration of originality and authenticity of the attached documents

- other documents related to the course of the procedure

The doctoral student Dr. Dimitar Angelov Dachev has submitted four publications in Bulgarian journals.

## **2. Brief biographical information about the PhD student**

Dr. Dimitar Angelov Dachev was born on October 6, 1982 in the city of Plovdiv. In 2007 he graduated in Medicine at the Thracian University in Stara Zagora. He started working in the Clinic of Pediatric Surgery at the University Hospital "St. George" in 2009 as a specialist. Acquired a degree in Pediatric Surgery in 2014. Since 2020 he has been a free doctoral student at the Department of Propaedeutics of Surgical Diseases, Department of Pediatric Surgery. He is a participant in a number of congresses and conferences in the country and abroad. He is a member of the Society of Pediatric Surgery.



### **3. Relevance of the topic and expediency of the set goals and tasks**

The topic of the presented dissertation is topical. The use of therapy to treat negative pressure wounds has increased significantly over the last decade. This method is increasingly used to treat complicated and chronic wounds in childhood. The proposed guidelines for achieving good outcomes in pediatric-specific clinical practice aim to provide practitioners with an evidence base that they can use to make decisions about safe and effective choices when applying VAC therapy for the treatment of wounds. This includes instructions on the values of the negative pressure, the type of regime in which this pressure is created, the type and type of foam used in the wound bed, the type, size and location of the drain used to evacuate wound secretions, the frequency of dressing changes. The guidelines reflect the level of knowledge about effective and appropriate wound healing therapy at the time of publication of this scientific paper. They are the result of the conclusions made on the basis of the described clinical cases related to the use of vacuum-assisted therapy for the treatment of wounds in childhood.

### **4. Acquaintance with the issue at hand**

The literature review presented by the doctoral student is 38 pages, covering 17 scientific papers in Cyrillic and 111 scientific papers in Latin. It comprehensively covers different definitions, classifications, features in the treatment of different types of wounds. The problems and opinions in the available literature on the complex treatment of acute and chronic wounds in childhood are considered. The features of the vacuum-assisted therapy method described in the literature are presented in detail.

### **5. Research methodology**

**THE SET GOAL** is clearly and concretely

**The tasks** are precisely formulated and sufficient to achieve the set goal.

The doctoral student gives an adequate answer to the tasks he has set in his dissertation.

### **6. Characteristics and evaluation of the thesis**

The dissertation submitted for review is written on 127 typewritten pages and is structured as follows:

1. Introduction -1 page

2. Literature review - 38 pages
3. Aim and tasks -1 page
4. Clinical material - 5 strangers
5. Methodology - 3 pages
6. Results - 51 pages
7. Discussion - 13 pages
8. Conclusion - 2 pages
9. Conclusions - 2 pages
10. Contributions - 1 page
11. Scientific papers related to the dissertation - 1 page
12. Bibliography - 9 pages

The dissertation topic is illustrated with 56 tables, 15 figures, 9 images and one diagram

### **7. Contributions and significance of development for science and practice**

The dissertation proposed for review by Dr. Dimitar Angelov Dachev describes three contributions of a scientific-theoretical nature and six contributions of a scientific-theoretical nature. All contributions relate to the introduction into clinical practice and adaptation of vacuum-assisted technology for the treatment of wounds to children. An algorithm of behavior in the treatment of wounds in childhood has been created. The obtained results are interpreted correctly and correspond to the conclusions made. The medical problem considered by the author has a perspective of development in the future.

### **8. Assessment of dissertation publications**

Four publications were presented in Bulgarian journals - Journal of Surgery, Proceedings of the National Congress of Pediatric Surgery, Proceedings of the First Symposium "Spring Surgical Days".



## **9. Personal involvement of the doctoral student.**

The dissertationist Dr. Dimitar Dachev personally conducted the research of the clinical material. The processing of the obtained results and contributions is his personal merit.

## **10. Sentences**

The sentences is prepared according to the requirements of the relevant regulations and reflects the main results achieved in the dissertation.

## **11. Critical remarks and recommendations**

Patients over 18 years of age are also included in the clinical material. This does not diminish the value and relevance of the dissertation, dealing with one of the problematic cases in surgery in general.

## **12. Personal impressions**

I know Dr. Dimitar Dachev as a doctor in the Pediatric Surgery Clinic of St. George University Hospital. Plovdiv. He is an ambitious and interested surgeon, ready to master the new methods of treatment in the field of pediatric surgery. Intelligent, educated and considerate, he enjoys authority among his colleagues.

## **13. Recommendations for future use of dissertation contributions and results**

The proposed dissertation, which examines in detail the diagnostic and treatment methods, as well as the analysis of the results could be useful not only for pediatric surgeons and pediatricians, but also for general practitioners, surgeons of various specialties in the country.

## CONCLUSION

The dissertation contains scientific, scientific-applied and applied results, which represent an original contribution to science and meet all the requirements of the Academic Staff Development Act in the Republic of Bulgaria (LDASRB), Regulations of LDASRB and the Regulations of MU - Plovdiv. The presented materials and dissertation results fully with the specific requirements adopted in connection with the Regulations of MU - Plovdiv for application of LDASRB.

The dissertation shows that the doctoral student Dr. Dimitar Angelov Dachev has in-depth theoretical knowledge and professional skills in the field of Pediatric Surgery, demonstrating qualities and skills for independent research.

All of the above motivates me to give my positive assessment of the research presented by the dissertation, abstract, results and contributions made and reviewed above. I would like to suggest to the Honorable scientific jury to award a doctoral degree to dr. Dimitar Angelov Dachev in the doctoral program in Pediatric Surgery.

9.05.2022 г.

Review

Заличено на основание  
Чл.5 §1, б."В" Регламент (ЕС)2016/679

Prof. Hristo Ivanov Shivachev, Ph.D.