

REVIEW

by Prof. Dr. Radosveta Stoyanova Andreeva - Borisova, PhD, Dsc
appointed as an internal member of the Scientific Jury and for the preparation of the
review with Order R-109-102 / 07.03.2022 of the Rector of the Medical University of Varna

Subject: Dissertation for obtaining a scientific and educational degree "Doctor"

Author: Dr. Gergana Trifonova Trifonova - Department of Pediatric Dentistry, Faculty of
Dental Medicine at the Medical University of Varna

Topic: "ASSESSMENT OF ORAL STATUS IN CHILDREN WITH MALIGNANT
DISEASES SUBJECT TO CHEMOTHERAPY" in the field of higher education 7. "Health
and sports" in professional field 7.2. "Dental Medical" and scientific specialty "Pediatric
Dentistry"

Brief biographical data

Gergana Trifonova was born in 1982. In 2006 she graduated from the Medical University - Plovdiv as a dentist, and in 2015 "health management" at the Medical University - Varna. Since 2010 he has been an assistant in the Department of Pediatric Dentistry at the Faculty of Dental Medicine - Varna. Dr. Trifonova is fluent in Russian and English.

General presentation of the procedure and the doctoral student

Представеният комплект материали на хартиен и електронен носител е пълен. Представен в законоустановения срок и в съответствие с Правилника за развитие на академичния състав в Медицински университет „Проф. д-р Параскев Стоянов“ – Варна.

Notes and comments on the documents

Dr. Gergana Trifonova presented in time and in accordance with the requirements of the Medical University - Varna.

The structure of the dissertation presented by Dr. Gergana Trifonova fully corresponds to the presentation for defense - introduction, literature review, purpose and tasks, methodology of the dissertation, results and discussion, conclusions, conclusions and

contributions. It is written on 158 pages and is illustrated with 6 tables, 52 figures and 6 photos. The bibliography includes 169 literary sources, of which 8 are in Cyrillic and 161 in Latin. The bibliography is extensive and well-designed. About 10% of the cited authors are from the last 5-6 years.

The abstract reflects the structure of the dissertation and meets the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria.

The doctoral student has attached three publications in connection with the topic of the dissertation.

Relevance of the topic and expediency of the set goals and objectives

Carcinoma is described as the uncontrolled proliferation of malignant cells and is usually considered a disease in adults. The types of carcinomas seen in children worldwide are very different from those in adults: leukemia, lymphoma and brain tumors are relatively more common in children.

The cancer patient is facing an attack on oral health from both the disease and treatment options. Some of these complications include: bleeding gums, ulcers, mucositis, taste changes, skin desquamation, xerostomia, opportunistic infections. As a result, all of these problems have the potential to increase mortality and morbidity in children with leukemia.

Patients in the younger age group show a higher incidence of oral complications caused by radiation and chemotherapy. Early intervention reduces the incidence of problems, minimizing the risk of oral and related systemic complications and should be based on the probable cause of the complication and related factors. Proper understanding of the pathogenesis of oral complications in these patients is important for oncologists and hematologists, and a multidisciplinary approach is essential to improve the quality of life of these patients. As the occurrence of oral complications is related to several factors, a multidisciplinary team, including an oncologist, hematologist, dentist and other specialists, is needed to deal with these conditions.

Knowledge of the problem

The introduction emphasizes the specifics of malignant diseases in children and in particular their impact on oral health and the need for a multidisciplinary approach in the treatment process.

The literary review presented in the dissertation is very in-depth and covers 10 sections in logical sequence.

The growing incidence of childhood malignancies has led to a steady and rapid increase in the number of scientific publications over the last decade. Dr. Trifonova concretely and analytically presents the most important approaches published in the literature in connection with the diagnosis of oral complications in patients with malignant diseases.

After an in-depth and analytical review of the literature and research on this issue, Dr. Trifonova came to the conclusion that information on this issue is insufficient and research on the treatment and prevention of oral complications in children with malignant diseases undergoing chemotherapy continues, with increasing intensity worldwide.

The aim of the dissertation is very clearly and specifically formulated - to analyze the clinical characteristics of oral changes in children with malignancies in the course of chemotherapy and to define optimal therapeutic and prophylactic regimens of complex medical and dental behavior in these children.

To achieve this goal, she sets 6 tasks, which also correspond to the goal in a logical sequence.

For the purposes of the dissertation, the oral profile of children with leukemia and children without cancer was studied according to: age, sex, DMFT, PLI, OHI and caries risk assessment. All children are clinically examined and evaluated on various indicators, depending on the tasks.

In order to obtain reliable results, the patients included in the study were evenly distributed by sex and age between the two groups.

All participants in the study had a medical history and a dental examination, including a study of oral hygiene status, DMFT, PLI.

Material:

The subject of the study were 100 children, of which 50 children with leukemia who underwent treatment for cancer and 50 children healthy controls. Each group of patients studied was detailed by gender and age.

Patients were selected according to specific criteria for inclusion and exclusion in the study.

In addition, a survey was conducted among 60 dentists.

Methods :

The research methods used are indicative of the desire of Dr. Gergana Trifonova not only to achieve new dimensions in diagnosis, control and treatment results, but also to successfully derive scientifically sound results and conclusions to support and improve clinical practice and the approach to minimize oral complications in children with cancer.

These statistical methods allow to illustrate in detail the tasks.

The results obtained on the individual tasks confirm the in-depth analysis of the clinical material. Despite the specifics of the processing of this clinical material, Dr. Trifonova very clearly presents it in tables and figures. The doctoral student reviews his / her results and discusses each individual task, which gives a very accurate assessment of the clinical material by comparing it with the available results of other authors who have performed similar studies among different groups of patients.

The discussion is focused and competent. The ability of Dr. Trifonova to analyze her own results in the context of those known in the literature is evident, comparing her results with the results of international and national databases.

Too scarce publications and information in the literature show that her research is timely, making it possible to apply an adequate algorithm for the treatment of oral complications in children with malignant diseases undergoing cancer therapy.

Based on the results obtained, 7 conclusions are formulated, which follow the logically set goals and objectives of the study.

Assessment of the oral cavity and treatment of dental complications are important for all children, but especially for children with cancer. These children in the various stages of cancer and treatment have a number of problems related to children's dental health, which may be associated with existing untreated dental caries, periodontal disease and / or pathological lesions of the hard and soft tissues of the oral cavity, the presence of oral manifestations of oncological disease, the development of oral complications as a result of oncological therapies and the development of long-term dental complications after completion of oncological therapy.

The results of the present study show that there is a strong relationship between oral hygiene and the severity of the development of oral mucositis in children with cancer before and during chemotherapy. On the other hand, the severity of oral mucositis associated with chemotherapy has a significant effect on the ability of children with cancer to swallow, including eating and drinking fluids. No relationship has been established between the sex and age of children with cancer and the development of oral mucositis. Cancer therapy, such as chemotherapy, is considered a risk factor for the development of oral mucositis.

The results of the study of dental specialists on their awareness of the specifics of dental treatment in children with cancer show that there are some gaps in the knowledge and skills of specialists to treat such children, which is a prerequisite for dental treatment to be conducted by a small circle of specialists.

With the overall analysis of the oral health of children with cancer and the awareness of dentists, Dr. Trifonova proves the hypothesis of the study, namely that children with malignant diseases have specific needs in the field of dental health and need an individual interdisciplinary approach to planning. of treatment.

The contributions presented by Dr. Trifonova are given very accurately and correctly and are defined as contributions of theoretical and practical nature.

Contributions of a theoretical nature

1. For the first time in Bulgaria the dental, oral-hygienic, periodontal, gingival and mucosal status of children with malignant diseases is studied
2. An original contribution to the country is the study of mucositis as a result of chemotherapy of children with cancer

Contributions of a practical nature

1. Recommendations are made for the dental treatment of children with cancer before and after starting chemotherapy.
2. A model of preventive care for children with cancer has been created with the participation of various specialists and parents to provide effective dental prevention of caries and its complications, gingivitis, periodontitis and mucositis
3. An algorithm for dental treatment of children with cancer is proposed
4. A model for dental care of children with oncological diseases during the oncological therapy is proposed

Dr. Gergana Trifonova presents 3 publications in periodicals. She is the first author in all publications. The publications reflect various aspects of the results obtained and the reviews of the literature, examining the association between oral complications and cancer in children..

The abstract is written on 64 pages and fully presents the dissertation.

In conclusion, I would like to emphasize again my very high appreciation for the great clinical and research activity presented in the dissertation of Dr. Gergana Trifonova and I will confidently and categorically vote "YES" and propose to the esteemed Scientific Jury to award educational and scientific degree "Doctor" of Dr. Gergana Trifonova Trifonova in the doctoral program "Pediatric Dentistry" professional field 7.2. Dental Medicine in the field of higher education 7. Health and sports.

20.04.2022

Prof. Dr. Radosveta Stoyanova Andreeva - Borisova, PhD,

Dsc

Varna

A handwritten signature in blue ink, consisting of a stylized capital letter 'A' followed by a period.