

*To the chairman of the Scientific Jury,
appointed by order of the
Rector of the Medical University - Varna.
№ P-109-470 / 05.11.2021.*

Statement

By Prof. Dr. Anton Yordanov Djorov, MD, PhD

*Acibadem City Clinic, Multidisciplinary Hospital for Active Treatment Tokuda EAD,
member of the scientific jury with order №P-109-470 / 05.11.2021. of the Rector of MU-
Varna.*

Subject: Dissertation for the award of educational and scientific degree "Doctor" in the scientific specialty "Therapeutic Dentistry" in the field of higher education 7. Health and sports in professional field 7.2. Dental Medicine, in the Department of Conservative Dentistry and Oral Pathology, FDM, MU-Varna.

Topic: "Application of cone-beam computed tomography in the endodontic practice"

Author: Dr. Slavena Svetlozarova Georgieva, assistant professor at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna, Faculty of Dental Medicine, Department of Conservative Dentistry and Oral Pathology.

Scientific supervisor: Assoc. Prof. Dr. Tsvetelna Borisova-Papancheva, MD, PhD

Form of doctoral studies: full-time

Brief biographical data of the doctoral student:

Slavena Svetlozarova Georgieva was born in the city of Varna on May 17, 1991. She graduated from the High School "John the Exarch", Varna in 2009. She graduated from the Medical University Prof. Dr. Paraskev Stoyanov", Varna in 2017. - specialty Dental Medicine and acquires a Master's degree in Dental Medicine. From 19.09.2017 is a part-time assistant at the Department of Conservative Dentistry and Oral Pathology. After winning a competition in March 2018 she became a full-time assistant at the Department of Conservative Dentistry and Oral Pathology. On 01.12.2018 begins her specialization in Operative Dentistry and Endodontics with training base UMDC, FDM, MU-Varna. She is enrolled as a full-time doctoral student at the Department of Conservative Dentistry and Oral Pathology on 01.02.2019. She teaches second- to fifth-year students Bulgarian and English language training in the disciplines Propaedeutics and Clinic of Conservative Dentistry.

General presentation of the dissertation:

The dissertation presented for my opinion contains 227 standard pages and is illustrated with 115 tables and 103 figures. The bibliography consists of 376 sources, of which 5 in Cyrillic and 371 in Latin. It includes an introduction, literature review, purpose and tasks, material and methods, results and discussion, summary, conclusions, contributions, bibliography and applications.

The presented abstract reflects the structure of the dissertation, as well as the most important results and contributions.

The study is reflected in 3 publications in which Dr. Svetlozarova is the first author and in 2 participations in international scientific forums.

Relevance of the topic of the dissertation:

In endodontic practice, the radiographic images are extremely important for preoperative diagnosis and the choice of treatment method. Conventional two-dimensional radiographic images provide accessible and high-resolution images, making them the most popular method for paraclinical diagnosis of diseases involving the pulp and periodontium. Despite their many advantages, two-dimensional radiographs are characterized by limited diagnostic potential. Their two-dimensional nature, as well as the superposition of anatomical structures, sometimes make them difficult to interpret, especially in cases with more complex morphology of the root canal system. The advantages of CBCT as a diagnostic tool in the field of endodontics have already been described and analyzed by numerous studies around the world. The possibility for three-dimensional analysis of the studied region, as well as the options for performing accurate linear measurements, greatly expand the diagnostic potential of CBCT, making it applicable in more complex cases of endodontic pathology, as well as in planning and conducting combined conservative surgical treatment. .

The aim of the dissertation is:

To study the possibilities of CBCT in the detection and diagnosis of anatomical variations of the endodontic space and the root canal system among the Bulgarian population.

The dissertation has 4 tasks:

1. Establishment of bilateral symmetry in the Bulgarian population in terms of the number of roots, root canals and the type of configuration of the root canal system by groups of teeth.
2. Establishing the frequency of available additional root canals and the type of configuration of the root canal system by groups of teeth among the Bulgarian population.
3. Determining the average working length by groups of teeth in the Bulgarian population.
 - 3.1. Comparison between the working length determined on the basis of measurement by

electrometric method and cone-beam computed tomography.

4. Investigation of the frequency of denticles in the RCS and root fractures, which occurred after endodontic treatment, among the Bulgarian population.

The results and the discussion are illustrated with tables and figures.

The conclusions summarize the results of the study.

The contributions are divided by the doctoral student into 5 with confirmatory character and 5 - with original character.

Confirmatory contributions:

1. The advantages of CBCT application in the field of endodontics have been proven.
2. The high frequency of available additional root canals in maxillary and mandibular molars, maxillary second premolars and mandibular incisors is confirmed.
3. The accuracy of the CBCT measurements when determining the working length is confirmed.
4. The possibilities to establish the configuration of the RCS and the presence of denticles and calcifications in the RCS are confirmed by CBCT-diagnostics.
5. The role of CBCT diagnostics in helping to detect root fractures is confirmed.

Contributions of original character for the country:


1. For the first time, a study with such a scope was performed, aimed at proving the application of CBCT in the field of endodontics.
2. For the first time a comparative study of the accuracy of determining the working length by CBCT - measurement and by electrometric method is conducted.
3. For the first time the frequency of available additional root canals by groups of teeth among the Bulgarian population was established, using CBCT as a diagnostic tool.
4. For the first time a CBCT study was conducted, aiming to establish bilateral symmetry between the number of roots, RCs and the type of the RCS-configuration in symmetrical pairs of teeth among the Bulgarian population.
5. For the first time a CBCT study was conducted, aimed at analyzing the configuration of the root canal system in each root by groups of teeth among the Bulgarian population.

There are no omissions in the documents presented to me by Dr. Slavena Svetlozarova. The dissertation "Application of cone-beam computed tomography in the endodontic practice" meets the statutory requirements for obtaining an educational and scientific degree "Doctor" according to ZRASRB, PPZRAZRB and the Regulations on the terms and conditions of acquiring scientific degrees and holding academic positions. in FDM, MU-Varna.

In conclusion: I propose to award Dr. Slavena Svetlozarova Georgieva the scientific and educational degree "Doctor" in the field of higher education 7. Health and sports in professional field 7.2. Dental medicine.

Date:
22.11.2021

Prepared the statement:
(Prof. Dr. Anton Yordanov Djorov, MD, PhD)

A handwritten signature in blue ink, appearing to be 'Anton Yordanov Djorov', is written over the text of the signature line.