

Opinion

From

prof. D-r. Vladimir Panov, PhD, DMD, DSc

Department of Conservative Dentistry and Oral Pathology,

Faculty of Dental Medicine, MU-Varna

ABOUT

Dissertation thesis of D-r. Alexander Ivanov Georgiev - regular PhD student at the - Department of Conservative Dentistry and Oral Pathology of the Medical Faculty of Dentistry - Varna on the topic "Influence of cardiovascular diseases and diabetes on dental treatment", submitted for the degree of Doctor of Education and Science with scientific supervisor Assoc. Dr. Miglena Balcheva-Eneva, Ph.D. and according to the order of the Rector of MU-Varna P-109-182 from 15.04.2022.

D-r Alexander Georgiev was born in 1989. In 2014 he graduated from the Department of Dental Medicine at the State Medical University, Sofia University. From 2015 to 2018 he is a specialist in oral surgery and acquired a specialty in 2019. Since the same year he has a Master's degree in Health Management from the Medical University of Sofia. Position held - Dentist at Outpatient clinic for individual practice for primary dental care IG Dental EOOD - Oral Surgeon - Specialised hospital for active treatment on Maxillofacial Surgery. Since 2018 he has been a full-time doctoral student at the Department of Conservative Dentistry and Oral Pathology at the State Medical University, Medical University of Varna.

Relevance of the problem

Cardiovascular and endocrine diseases are extremely prevalent in Bulgaria, often occurring simultaneously in the same patients. Dentists are often the first to observe the negative effects caused by the diseases and the medications that are taken to treat these diseases. Neglect of oral health can lead to deterioration of the general condition of patients as well as worsening of the local indicators of these diseases. The need to treat these patients requires dental practitioners to have the knowledge and skills to conduct therapy appropriately. Increasing knowledge in this area would lead to better and adequate care for these patients. This is what makes the development relevant, useful for practice and dissertationable.

Structure of the dissertation

The dissertation contains 171 standard pages and is illustrated with 46 tables and 27 figures. The bibliography consists of 172 sources, of which 4 in Cyrillic and 168 in Latin. Structurally, it fully complies with generally accepted norms.

The introduction directs us to the idea. The literature review reflects current knowledge of the problem, its general medical status and its relationship to oral disease, diabetes and cardiovascular disease and their impact on dental treatment. It describes medications used in the treatment of cardiovascular disease, the major invasive manipulations used in patients with comorbidities, the prognosis of treatment success; factors compromising treatment success in invasive dental treatment, and the impact of systemic treatment of common diseases on oral health status and treatment. The review ends with a conclusion and unresolved issues.

The aim is clearly formulated-To compare the success rate of invasive dental treatment in patients with cardiovascular disease, diabetic patients and healthy patients, and the 4 objectives set allow the study to be completed.

Materials and Methods - The study included men and women divided into age groups according to WHO, divided into three conditional groups - clinically healthy, with CVD, taking antiaggregants or anticoagulants, and diabetic. The total number of invasive manipulations performed was 325, and participants also had 5 ml of venous blood drawn.

As a result of the studies, Dr. Georgiev found that the number of men and women who required invasive dental treatment was equal. The number of "healthy" patients decreased significantly in the second age group, and in the third and fourth all participants had concomitant diseases. At least two-thirds of the patients requiring invasive dental treatment had one or more co-morbidities. Patients in the age group 45-59 years underwent invasive dental treatment most frequently. In this group, the number of patients with concomitant diseases significantly outweighs that of healthy patients.

In both men and women, there is a tendency for blood sugar levels to increase with increasing age. Dr. Georgiev recommends that patients in older age groups be screened for diabetes to prevent future complications.

On task two, it was found that a total of 3.4% of cases had an altered recovery period. The blood parameters of the patients on this task are a prerequisite for a good recovery process in any type of manipulation.

The results of Task 3 demonstrate that current trends for management of patients on anti-aggregant and anti-coagulant therapy can be successfully applied to

invasive dental treatment without altering patient outcomes. Platelet count, APTT, bleeding time and clotting time should be investigated in patients with prolonged aspirin intake.

In medium and high surgical volume, discontinuation of the medication and replacement with low molecular weight heparin is necessary. Small-volume invasive manipulations can be performed without change of therapy at INR values up to 3.5. In patients at high risk of thromboembolism, any change in therapy may result in a fatal accident. In patients with severe antithrombotic or anticoagulant therapy, it is strongly contraindicated to perform invasive manipulations without a change in medication intake.

In task 4, 125 manipulations were performed on 11 diabetic patients who were taking a systemic medication to reduce blood glucose values. The diabetic patients had good and moderate blood glucose control. Those with poor glycemic control were not recommended to undergo routine surgical interventions. No inflammation or delayed recovery was reported in 98.4%. The results of the latter task suggest that with good preparation and adherence to modern surgical protocols, surgical treatment of diabetics can be predictable.

A treatment regimen for diabetics has been established. A total of 15 conclusions and 5 contributions were formulated. The bibliographic reference is comprehensive, reflecting worldwide experience on the subject.

Publication activity

D-r. Georgiev has presented three articles in which he is the first author, together with his supervisor. This shows his leading role in the development. The research has also been presented at two scientific congresses in 2019.

Author's summary

The abstract corresponds to the content of the thesis and complies with generally accepted requirements. The 58 pages present the aim, objectives, material and methods and the results obtained. The conclusions, contributions, publications and participations in scientific events of Dr. Georgiev are also included.

Conclusion

The development is shaped according to the generally accepted requirements of the Academic Staff Development Act of Republic of Bulgaria, has scientific and applied value and its structure fully meets the accepted norms. All this gives me grounds to confidently recommend the members of the scientific jury to support D-r. Alexander Georgiev for the acquisition of the education and scientific degree "Doctor".

06.06.2022г.

A handwritten signature in blue ink, consisting of stylized, cursive letters that appear to read 'VP'.

Professor. D-r. Vladimir Panov, MD