



REVIEW

By Prof. Petya Pechalova, PhD

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of a dissertation work for the acquisition of the scientific and educational degree "Doctor" in the scientific specialty "Dental imaging diagnostics" on "Radiographic parameters associated with unilateral temporomandibular joint diseases".

by Dr. Borislava Nikolova Petrova,

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The opinion presented was prepared in accordance with the Law on the Development of the Academic Staff in the Republic of Bulgaria, the rules for its application and the relevant rules of the Ministry of Education - Plovdiv.

**Relevance and significance of the problem:** The topic of the dissertation is relevant given the data on the increase in the average age of the population of the Republic of Bulgaria and the trends for the significant frequency of joint disabilities in old age. Early diagnosis of temporomandibular joint disorders determines their successful treatment.

The clinical importance of the problem developed in the dissertation correlates with the peculiarities of the study, specifying the pathological conditions and the appointment of appropriate treatment for different groups of patients.

**Characterization and evaluation of the dissertation work:** The dissertation work is written on 183 pages, contains 51 figures, 49 tables and 22 appendices. It is structured as follows: introduction – 2 pages; literature review – 53 pages; purpose and tasks – 1 page; material and methods – 14 pages; results, discussion and conclusions of own studies – 67 pages; general conclusions – 2 pages; contributions – 2 pages; applications.

The literature review represents an independent study in which imaging methods for the study of the temporomandibular joints in various nosological units are competently and thoroughly examined.

The goal is clearly formulated, and four tasks logically derived from it are defined for its achievement.

The methodology of the study and the material on which it was conducted are described in detail and consistently. Sufficient groups were used in terms of volume, and the means applied in performing the tasks were from the arsenal of modern imaging diagnostics. Statistical methods are correctly selected and used.

Own results are described in detail, accompanied by visualization in tabular form, corresponding to the set tasks. According to the first task, six conclusions are presented, according to the second - eight conclusions, according to the third - four, according to the fourth - nine. The general conclusions summarize the results of the own studies and are divided into nine points.

The author has divided the contributions into two groups - confirmatory and original. I accept that the main contribution of the dissertation work is the presented clinical criteria for the presence of a significant temporomandibular disorder, including visual, anamnestic and clinical assessment of the

condition and which are a prerequisite for a more in-depth study of the patient's temporomandibular joints.

**The auto-abstract**, which the doctoral student presents, is written on 49 pages and corresponds to the dissertation work.

**Publications** on the topic of the dissertation: the author has presented three publications related to the dissertation, one of which is in a refereed journal, according to the requirements described in the regulations of the MU - Plovdiv and which satisfy the quantitative requirements for obtaining the ONS "Doctor". The doctoral student is the first author of all three publications.

**Conclusion:** Dr. Borislava Nikolova Petrova presents a dissertation on a current and significant problem in dental practice. The scientific work is properly structured, the goal and tasks are clearly formulated, the methods used are selected skillfully and used on a sufficient volume of material to ensure the credibility of the results obtained. The dissertation contains theoretical and scientific-applied contributions that enrich clinical practice. The presented dissertation work on the topic "Radiographic parameters associated with unilateral temporomandibular joint diseases" meets all the requirements of Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its application and the Regulations for academic development of MU - Plovdiv, which is why I confidently give my positive assessment to Dr. Borislava Nikolova Petrova to be awarded the scientific and educational degree "Doctor" in the scientific specialty "Dental Image Diagnostics".

**Prof. Petya Pechalova, PhD** Заличено на основание  
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