

# STANDPOINT



From **Assoc. Prof. Julian Rumenov Ananiev, MD, PhD**

Dean of Medical Faculty, Trakia University,

Associate Professor in the Department of General and Clinical Pathology, Forensic Medicine and Deontology, and Dermatovenereology

on the Dissertation of **d-r Mariya Stoyanova Koleva-Ivanova,**

Department of "General and Clinical pathology" – MU – Plovdiv, Medical Faculty, for acquisition of educational and scientific degree of „Doctor“ in the field of higher education 7. „Health and Sport“, professional field 7.1 „Medicine“, scientific speciality „Pathoanatomy and cytopathology“,

On the topic: „ **Eosinophilic metaplasia in prostatic epithelium: main characteristic, morphology, morphogenesis**“

**Supervisor:** Associate Professor d-r Dorian Ivanchev Dikov, MD

The submitted dissertation is written on a total of 165 pages and includes the parts: introduction, literature review, aim and tasks, material and methods, results, discussion, conclusions, contributions, bibliography, and at the end are presented publications related to the dissertation.

After the chapter "Introduction", in which Dr. Koleva focuses on the problems in prostate pathology, follows the chapter "Literature Review", in which on 39 pages, the author thoroughly and gradually presents the processes and types of prostate metaplasia as well as eosinophilic metaplasia (EM) and its morphological characteristics. In several short sections is presented also the connection of EM with some pathological processes and the presence of EM in other organs as well as their significance in them. Of particular interest should be noted the preparation and good presentation of own pictures with the methods of routine histochemistry and immunohistochemistry, as well as electron microscopy. Morphological characteristics of the process, its relationship with other pathological changes, such as chronic inflammation and atrophy, and the comparison of metaplasia with a number of differentially diagnostic conditions is very successful and gives a complete look of the chapter and the ability to identify the

debatable moments in the scientific study. The chapter concludes with a summary of the literature and five conclusions of the review with the relevant sub-conclusions, and here Dr. Koleva presents the debatable points regarding the lack of specific data on the prevalence of EM, some qualitative and morphological features, biological significance, as well as in-depth ultrastructural study and connection with socially significant diseases.

The chapter "Aim and tasks" follows, in which Dr. Koleva aims to study quantitatively and qualitatively the eosinophilic prostate metaplasia of TURP material, clarifying the pathogenesis and general pathological significance of the process. Six tasks are described in detail in direct relation to the aim.

In the chapter "Material and methods" Dr. Koleva clearly presents two groups of cases - 61 TURP-materials from the biopsy archive of the Department of Clinical Pathology of University Multiprofile Hospital for Active Treatment "St. George" EAD - Plovdiv for a period of 1 year and 62 TURP-materials from the archive of the Service d'Anatomie et de cytologie pathologiques, Grand Hôpital de l'Est Francilien, Jossigny, France. Additionally, 19 autopsy prostates from the autopsy archive of two hospitals were used as a control group of the patients with the kind cooperation of the supervisor. The histological and immunohistochemical techniques, the ways of reporting the expression of the used markers, as well as the statistical methods of examination are described in detail, including the following: classical histological technique, semiquantitative histological examination, histochemical technique, immunohistochemical technique, statistical methods, graphs and applied software.

The "Results" chapter describes widely the results obtained for each of the set tasks, as the results from the first to the fifth task are illustrated with numerous pictures, figures and tables.

The chapter "Discussion" follows, in which Dr. Koleva analyzes the data from the previous point and, comparing them with the data she found in the literature, makes a successful attempt to explain and discuss her results. The chapter begins with an overview, and then, based on modern publications, it brings out the similarities and differences, fully responding to the necessary analysis-synthesis of the achieved results. At the end of the chapter the author summarizes the previous results and based on them, clarifies the pathogenesis and general pathological significance of EM.

The Dissertation continues with the chapters "Conclusions" and "Contributions", in which Dr. Koleva presents seven conclusions, as well as a number of scientifically-theoretical and scientifically-applied contributions, both original and confirmatory.

The Dissertation ends with a "Bibliography" containing 156 authors, of which 10 in Cyrillic and 146 in Latin in printed publications, a large percentage of which are printed in referenced and / or indexed periodicals.

The dissertation contains a total of: 28 tables, 75 pictures with high resolution and quality, as well as 6 figures.

Dr. Koleva presents three publications in peer-reviewed and indexed journals in the literature database.

An integral part of the provided materials is the author's abstract, in which the main part of the dissertation's work is presented on a total of 63 pages.

Based on the above, I believe that the dissertation of Dr. Maria Stoyanova Koleva-Ivanova is a fully completed scientific study with scientifically applicable, clinically and diagnostically significant contributions.

I confidently give my positive assessment and I will vote "Positive" for acquisition of educational and scientific degree of „PhD“ to Dr. Maria Stoyanova Koleva-Ivanova in the field of higher education 7. "Health and Sports", professional field 7.1 "Medicine", scientific specialty " Pathology and Cytopathology ", and I also allow myself to recommend the honorable members of the scientific jury to support this choice as well.

Stara Zagora



Assoc. Prof. Julian Rumenov Ananiev, MD, PhD