

REFERENCE

From

PROF. DIMITER DINKOV MLADENOV, MD, PhD, D.Sc.

Department of Urology, Faculty of Medicine

Medical University, Sofia, Clinic of Urology

University Hospital "Alexandrovska", Sofia

at

the scientific work of BORIS SERYOZHEV MLADENOV, MD, PhD

Sen. Assistant Professor, Clinic of Urology

University Hospital "N.I. Pirogov", Sofia

for the award of the scientific title "Assoc. Professor"

I. Information about the procedure.

On the basis of Article 60, paragraph 2 of the Regulations for the Development of the Academic Staff at the University Hospital "N. И. Pirogov" EAD, according to the decision of the Scientific Council with protocol No. ND-01-1 / 25.01.2023 and the Order of the Executive Director No. RD-26-244 / 31.01.2023, I have been elected as a member of the Scientific Jury for the academic position "Associate Professor" in the scientific specialty 03. 01.42 "Urology", in the field of higher education 7, "Health and Sport", professional field 7.1. "Medicine", scientific field "Medical Sciences" for the needs of the Clinic of Urology, University Hospital "N. И. Pirogov EAD, Sofia. The competition was announced in the State Gazette No 86 / 28.10.2022.

According to the decision of the first meeting of the scientific jury, I am appointed to prepare a review of the scientific works and scientific and teaching activities of Dr. Boris Serozhev Mladenov, who is the only candidate. The Admission Committee reviewed the candidate's documents and came up with a positive opinion that they were submitted within the legal deadline and meet the requirements of the Regulations for the Development of the Academic Staff of the University Hospital "N.I. Pirogov" EAD, Sofia.

II. Biographical data related to the candidate's scientific and practical activity.

Dr. Boris Seryozhev Mladenov was born on 25.10.1985 in Sofia. In 2010 he graduated in medicine at the Medical University, Sofia. The same year he started working at the Clinic of Urology, University Hospital "N. I. Pirogov" EAD, Sofia as a resident doctor. In 2011 he was appointed assistant professor and in 2017 – sen. assistant professor. Since 2018 he has been working as a consultant at the Hospital for Active Treatment of Oncological diseases, Sofia.

In 2016, the candidate defended his dissertation on "Modern approaches in the diagnosis and treatment of massive non-traumatic hematuria" and obtained the scientific and educational degree "Doctor". In 2017, Dr. Mladenov gained medical specialty - Urology. Between 2015 and 2017 he specialized in health management at the Medical University, Sofia.

In 2011, he was in clinical training at the State Hospital in Koblenz, Germany. In 2015, he participated in the annual Urology Seminar in Salzburg, Austria and the European Postgraduate Training Programme in Urology in Prague, Czech Republic. In 2019, he actively participates in the Specialized Uro-Oncology Seminar in Salzburg, Austria, which is held in collaboration with Cornell University, USA.

Dr. B. Mladenov is fluent in written and spoken English and German. He is an accomplished specialist and professional with excellent surgical capabilities. He is definitely highly intelligent, communicative, non-conflicted, able to work in a team, and experienced in international work. He has strong presentation skills.

The candidate is a member of the Bulgarian Medical Association, the Bulgarian Urological Society and the European Association of Urology.

III. Analysis of scientific research output and formulation of scientific contributions.

A. Total number of scientific papers.

I. Scientific production in scientific aspect - The candidate submitted for review 90 scientific papers and 5 chapters of a monograph. 47 abstracts in Bulgarian and foreign non-refereed, peer-reviewed and non-peer-reviewed scientific collections and journals without impact factor are not reviewed. 43 publications and 5 chapters of a monograph remain to be reviewed.

A. Total number of scientific papers - 90

- full-length publications in Bulgarian and foreign refereed and indexed in Scopus and Web of Science periodical medical journals - 13 (two of them are in print)

- abstracts in foreign refereed and indexed in Scopus and Web of Science scientific journals - 9

- full-length publications in Bulgarian and foreign non-refereed but peer-reviewed medical journals - 21

- abstracts in Bulgarian and foreign non-refereed but peer-reviewed scientific journals and journals with abstracts without impact factor - 22

- abstracts in Bulgarian and foreign scientific proceedings with abstracts without impact factor - 25

B. Participation in monographs - 1

1. Emergency Urology - BAS Publishing House, Sofia, 2020 - participated in 5 chapters

C. Participation in textbooks - 2 (in Bulgarian and English)

1. Urology - textbook for medical students (in Bulgarian and English) - University Publishing House "Sv. Kliment Ohridski, Sofia 2018 - 2019.

D. Authorship.

- First author - 30
- second author - 5
- third and next author - 13

E. Total number of citations - 25

- in refereed journals with scientific peer review - 19
- in non-refereed journals - 6

F. Impact factor.

- personal impact factor - 4,644
- total impact factor - 29,229

G. Participations in scientific projects - 2

The publications of dr. Mladenov include diverse clinical material from urological practice. His scientific interests are related to the diagnosis and treatment of oncological diseases, modern treatment of urolithiasis, emergency conditions in urology, etc. His publications are divided into several groups and have different focus as follows:

1. Oncourology.

The candidate has a marked interest in the diagnosis and treatment of oncurological diseases. A significant part of his publications are on the discussed topic. Numerous studies have been presented on both bladder cancer and the diagnosis and treatment of prostate cancer. He co-authored the first articles in this country on PET/CT diagnosis of prostate cancer. The therapeutic nucleomedical options and management of advanced prostate cancer are also described.

2. Urologic Trauma.

Many of the publications of Dr. Mladenov deal with the topic of trauma of the urinary system and more specifically of the male genital organs. The candidate has considerable experience in their diagnosis and treatment, which is the result of his daily work. In connection with the problem, he participated in a collective monograph and presented 5 author chapters from it. The author personally took an active part in the introduction and validation of a modern approach to the treatment of renal trauma at the University Hospital "N. I. Pirogov". He strongly recommends compliance with the AAST classification with regard to organ-sparing approaches, selective embolization, etc.

On the other hand, dr. Mladenov in several publications commented on non-traumatic emergencies in urology. Several scientific articles in relation to it have been submitted for review - these are hematuria and acute scrotum. The author has undoubtedly contributed to the development of a specific professional approach to the treatment of priapism as an emergency urological condition.

3. Hematuria as a symptom in urology.

Some of the author's publications are related to the study of macroscopic hematuria. In most of them he pays special attention to its manifestation and features in malignant diseases. The relationship of

hematuria and anticoagulants widely used today are investigated. He contributed a chapter to a monograph on this problem. As a result of his studies, he proposes an algorithm for the management of macroscopic nontraumatic hematuria in the emergency outpatient clinic.

4. Genetic features of bladder cancer.

Dr. Mladenov has numerous publications as a co-author in multidisciplinary teams. Mainly they pay attention to the genetic specificity and peculiarities of oncological diseases, in particular bladder carcinoma. His deep interest in the problem made him a participant in the development of 2 scientific projects on the topic at the Medical University, Sofia and the Scientific Research Fund.

5. Pediatric Urology and others.

Some of the candidate's publications are related to paediatric urology and congenital malformations of the genitourinary system.

He has also published articles related to urological complications after COVID-19 virus infection, which is a topical issue in the current conditions of the disease spread.

Several studies related to reconstructive urology in children are also presented. The treatment of urethral strictures in adults represents a contribution to this problem. As a member of the author team, the candidate also gives deserved attention to casuistry in urology such as the now rare renal echinococcosis, rare testicular tumors, etc.

The scientific directives of dr. Mladenov have been published in a number of periodical scientific medical journals in the country and abroad such as J. "Uronet", J. "Folia Medica", Journal of Urology and Endorology, J. "Emergency Medicine", Journal of Bulgarian Society of Oncology, J. "Radiology", Journal of Emergency Medicine and Radiology. "Urol. Case Rep.", "Urol. "Bulgarian Journal of Public Health", Journal of Cancer, "Contemporary Medical Problems", J. "Medical Review", J. "Experimental and Therapeutic Medicine", J. "Indian J Radiol Imaging, etc.

IV. Most significant scientific and applied contributions.

Scientific-theoretical contributions:

1. The possibilities of diagnosis and treatment of renal injuries are considered in detail and the results of conservative and operative treatment are analyzed according to the AAST classification grades.
2. The possibility of conservative treatment of renal injuries for nephron-sparing and routine application of selective angioembolization are confirmed.
3. The possible genetic link between bladder carcinoma oncogenesis and mutations in patients with more aggressive types of carcinomas is investigated as possible "candidates" for future targeted therapy.

Scientific and applied contributions

1. An exemplary treatment protocol for patients with upper and lower urinary tract hematuria is proposed.

2. A contemporary approach to the management of renal trauma has been developed.
3. A management algorithm for patients with priapism has been developed.

Evaluation of the scientific activity of Dr. Mladenov.

- The entire scientific activity of the candidate determines his contribution to the development of urological practice in Bulgaria.

- His scientific directives are proven to be modern, necessary, thorough and of proven high scientific-applied value for everyday urological activity.

- He participates regularly and actively with papers and presentations in national and international scientific events, which is helped by his knowledge of foreign languages and his great practical and professional experience.

V. Medical activity.

Dr. B. Mladenov has over 10 years of experience as a urologist. His entire professional career was spent in the Urology Clinic of the University Hospital "N. И. He has a long career in the field of M.D. medicine.

The candidate has a lasting interest in modern diagnostic and operative methods in urology. He is proficient in all diagnostic and surgical techniques in practice. It is easy to work with him in a team, he has developed a sense of personal responsibility and self-criticism, which is a particularly important quality for any surgeon.

VI. Teaching.

The candidate submits a report on his teaching activity between 2017-2018 as a visiting lecturer at the Faculty of Medicine of St. Kliment Ohridski University, Faculty of Medicine, Sofia. He conducts theoretical and practical training of medical students and urology postgraduates in Bulgarian and English in the discipline of "Emergency Medicine", carries out expert and scientific research activities. He is a scientific supervisor of 2 residents in urology.

VII. No procedural violations were found during the defence.

VIII. Conclusion.

I know personally Dr. Boris Mladenov and his entire professional development as a responsible and purposeful active Bulgarian urologist. He is a well-established specialist, with great professional and practical experience. Over the past years I have had the opportunity to follow in detail his sustained efforts and scientific research in urology. Based on the information provided to me about the scientific volume and scientific-practical value of his scientific publications, my assessment is definitely positive. I strongly support his candidature for the announced competition for the academic post of Associate Professor as fully justified.

All this gives me a moral reason to recommend the members of the honorable scientific jury to vote positively and award to Dr. Boris Seryozhev Mladenov the academic position of "Associate Professor" at the Clinic of Urology of the University Hospital "N. I. Pirogov EAD, Sofia in connection with a competition announced in the State Gazette, issue 86 / 28.10.2022.

15.02.2023

Sofia

Reviewer:

(Prof. D. Mladenov, MD, PhD, D.Sc.)