#### **REVIEW**

## By Prof. Dr. Irena Dimitrova Kostadinova, Dr. Med. Sc.

Nuclear Medicine Clinic, UH "Acibadem City Clinic-Mladost", member of the Scientific Jury on the competition for occupying the academic position "Professor" in the scientific specialty of "Nuclear Medicine", in the field of higher education 7. "Health care and Sports", professional direction 7.1 "Medicine", for the needs of the Faculty of "Dental Medicine", Department of "Periodontology and Dental Implantology", MU-Varna, announced in SG No. 41/3.6.2022.

**Re:** The application of Associate Professor Dr. Borislav Georgiev Chaushev, MD, Head of the Nuclear Medicine Clinic and Head of the Department of Periodontology and Dental Implantology, Faculty of Dental Medicine, MU-Varna.

## I.Professional development

Assoc. Prof. Chaushev was born in 1974 in the city of Varna and in 2001 he graduated from the Medical University - Varna. Right during his studies, he showed an interest in nuclear medicine and in 2002 he began his specialization, which he successfully completed in 2007. After free doctoral studies, in 2010 he obtained the Educational and scientific degree "Doctor" with a successful defense of a dissertation on topic "Nuclear Medicine Methods for establishing disorders in the motor-evacuator function of the stomach in various diseases". After winning a competition in 2006, Dr. Chaushev was successively appointed as a chief assistant, and since 2015 he has been an associate professor at the Department of Imaging, the Nuclear Medicine Clinic, Metabolic Therapy and Radiotherapy, as well as as its Head since 2017. In 2020 was elected Head of the Department of Periodontology and Dental Implantology, Faculty of Dental Medicine, MU-Varna.

As a post-graduate student, Dr. Chaushev attended numerous qualification courses, as well as underwent short-term specializations concerning the diagnostic application of PET-CT, pediatric oncology, nephrourology, neurology and nuclear endocrinology, in prestigious European centers of nuclear medicine in London, Vienna, Leipzig, Zagreb. Dr. Chaushev's high work capacity, motivation and ability to work in a team, as well as to solve all tasks in the Clinic of Nuclear Medicine and in the Department of "Periodontology and Dental Implantology" in a timely and professional manner, with dedication and with all his energy, are impressive. He shows himself not only as a reliable administrative manager and lecturer of students and post-graduate students, but also as a doctor with deep scientific interests concerning the diagnostic application and algorithm of multimodal imaging technologies - SPECT-CT and PET-CT. He speaks English and Russian.

# II. Scientific research activity

In the current competition for the "Professor" degree, the candidate presents a total of 112 scientific papers, 35 of which were published after the awarding of the academic title "Associate Professor". Of the latter, 16 have been published in full text in medical periodicals in the country and abroad, he took part in 2 monographs and 17 participations in international and national scientific forums. He is the author or co-author of a total of 10 scientific publications, referenced and indexed in world-renowned databases.

Prof. Chaushev's scientific interests are primarily focused on nuclear gastroenterology, oncology, the comparative evaluation of nuclear medicine and imaging methods, as well as on nuclear pediatrics and cardiology. The author has very precisely and clearly formulated his main scientific contributions, the most significant of which are:

- 1. For the first time, a modified method for serial gastroscintigraphy with a special diagnostic value in socially significant diseases such as diabetes mellitus, Parkinson's disease and multiple sclerosis is being introduced in our country. With it, discrete disturbances in gastric motility, undetectable with other research methods, can be visualized, which is a prerequisite for the inclusion of early adequate treatment in gastric atony.
- 2. In the field of nuclear oncology, the author has made numerous contributions of methodically applied and scientific nature of national and international importance in oncological diseases, applying PET-CT, namely:
- For the first time, the role of FDG PET/CT in detecting early asymptomatic recurrences in cervical carcinoma patients with high values of the tumor marker SCC and negative conventional imaging studies has been studied and proven
  - The role of 68Ga-PSMA PET/CT as the method of choice for restaging and staging /at high risk/ of patients with prostate cancer has been established, superior to conventional CT in the diagnosis of local recurrences and distant metastases
  - The definitive role of 18F-FDG PET/CT as a whole-body imaging modality in finding the localization of an obscure primary tumor focus, for determining the biopsy site and visualization of a synchronous/metachronous tumor has been evaluated and proven.
  - The diagnostic and prognostic value of an increase in the quantitative index-SUV max in regional lymph nodes in patients with NSCLC before treatment, which is also associated with a shorter overall survival, has been studied and proven.

- The role of 18F-FDG PET/CT as a non-invasive imaging method for reliable localization of primary tumors of the head and neck with proven metastatic neck lymph nodes from squamous cell carcinoma has been established.
- The role of 18F-FDG PET/CT in monitoring the clinical response of chemotherapy and radiotherapy in patients with malignant epithelial tumors of the head and neck is studied and demonstrated.
- The role of PET/CT in the diagnosis and staging of advanced mammary gland carcinoma is also evaluated with a view to choosing a therapeutic approach.
- 3. The role of nuclear medicine methods in certain non-oncological diseases is also being studied, namely:
- That of the dynamic renal scintigraphy with 99mTc-DTPA in the diagnosis and grading of congenital hydronephrosis, as well as in the functional assessment after corrective surgery
- Of 18F-FDG PET/CT as an imaging method in the diagnosis of complications of infective endocarditis.

The total impact factor of the 35 scientific works presented in the competition for "Professor" is 146,547. It becomes clear that Assoc. Prof. Chaushev is an active author who is constantly developing as a professional, scientist and teacher, sharing his experience in the country and abroad, with an ever-increasing authority among his colleagues from various specialties - nuclear medicine, radiologists, oncologists, urologists, dentists. With his work as Head of the Department of "Periodontology and Dental Implantology" at MU-Varna, he skilfully manages its activities, and under his supervision this year a dissertation was defended by a young colleague for the Doctor degree. Additionally, on his initiative and under his

scientific guidance, three more dissertations were defended, two of them at the MU-Varna and one at the MU-Plovdiv, which significantly exceeds the legally required number of at least two doctoral students and shows the great motivation and dedication of Assoc. Prof. Chaushev for the professional and scientific development of young colleagues. He fully meets the requirements of NACID for holding the scientific title "Professor".

### III. Public activity

Assoc. Prof. Chaushev is an active and successful organizer, leader and professional, with the skills to work in a team, to teach students and post-graduate students, dedicated to solving problems and developing the activity in the Clinic of Nuclear Medicine and the Department of Periodontology and Dental Implantology.

He is a member of prestigious professional Bulgarian and international organizations - the Society of Nuclear Medicine, BAR and EANM.

# IV. Training and teaching activity

It is evident from the presented documents that Assoc. Prof. Chaushev, from a total of 20 years of work experience has 10 years of teaching experience with students of medicine, dentistry and X-ray laboratory technicians at the Medical University of Varna with a study load for the period 2018-2021, varying between 86 h and 176 h. He was the supervisor of a total of 4 post-graduate students.

CONCLUSION: Assoc. Prof. Chaushev is the only candidate in the competition for the scientific title "Professor" in the scientific specialty

"Nuclear medicine", for the needs of the Faculty of Dental Medicine, Department of Periodontology and Dental Implantology.

Assoc. Prof. Chaushev is one of the leading specialists in our country in the field of nuclear medicine and especially in nuclear oncology and nuclear gastroenterology, with a contribution to the development and clinical application of new hybrid imaging methods and their inclusion in the overall diagnostic algorithm of a number of oncological and non-oncological diseases. Bearing in mind the professional and organizational experience he has already accumulated, with recognized scientific achievements in the country and abroad, supporting and managing new scientific personnel and complying with the Regulations for the development of the academic staff, I consider that he fully meets the requirements of the law by giving him a positive mark and I strongly recommend to the members of the esteemed scientific jury to choose as "Professor" the candidate Assoc. Prof. Dr. Borislav Georgiev Chaushev, MD.

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