

REVIEW

BY MEMBER COR. PROF. Dr. NIKOLAI GABROVSKI, MD

According to the procedure for occupying the academic position "associate professor", area of Higher Education 7. Health care and sports by professional direction 7.1. Medicine, scientific specialty "Neurosurgery", for the needs of the Maxillofacial Surgery Clinic, UMBALSM N.I. Pirogov, announced in the "State Gazette", No. 67/04.08.2023.

The Scientific Jury was determined by Order of the Executive Director No. RD-26-2401/14.12.2023 and decision of the Scientific Council by Protocol No. ND-01-04/30.11.2023.

All the requirements of Section III of the Regulations for the development of the academic staff of UMBALSM "N.I. Pirogov" EAD - Sofia for the terms and conditions for occupying the academic position of "associate professor" have been met.

One candidate submitted documents for the competition and was admitted by the commission:

DR SVETOSLAV VASILEV SLAVKOV

I do not have a conflict of interest with the applicant and have not identified any evidence of plagiarism.

Biographical data. Education. Qualification.

At the time of application to the competition, Dr. Svetoslav Slavkov was acting as Head of the Maxillofacial Surgery Clinic at UMBALSM "N.I. Pirogov" EAD - Sofia. Until the merger of the Specialized Hospital for Maxillofacial Surgery with Pirogov, he led the treatment activity there and led a team of twenty doctors and health care specialists. He has 30 years of professional practice in the field of maxillofacial and oral surgery. He is qualified in both specialties, both as a master's degree in "Medicine" and in "Dental Medicine", and as a completed postgraduate training. He has an additional qualification in "Health Management and Organization in Health Care".

Dr. Slavkov has completed a number of training courses in Bulgaria and abroad, such as a course on "Orthognathic surgery", "Bimaxillary and craniofacial surgery", "Squamous cell carcinomas of the head and neck", "Form with Function: Current Standarts in Tissue Preservation and Simplant Site Development", "AO CMF Lighthouse Course - Reconstructive Surgery in Head and Neck with Flop Harvesting (with Human Anatomical Specimens) and others. He is a member of the EUROPEAN ASSOCIATION OF CRANIO-FACIAL SURGERY, Bulgarian Dental Union (BZS), Bulgarian Medical Union (BLS). In 2020 he successfully defended a dissertation in the scientific specialty "Surgery" on a serious epidemiological study on the topic "Diagnostic, treatment and epidemiological features in patients with salivary gland tumors - 10-year experience".

Dr. Slavkov speaks English and French. He works with specialized software products related to the use of modern medical equipment.

Research activity and contributions.

Dr. Svetoslav Slavkov presents one dissertation work, 35 full-text publications and one monograph published on the basis of a dissertation work, as publication activity. Five articles used for entry in the NACID under the procedure for awarding the educational and scientific degree "doctor" have been excluded from a review in the present competition. Ten of the articles remaining for review are publications in international journals, referenced in the world databases Scopus and Web of Science, which meet the additional requirement of the Pirogov Scientific Council for IF. Its value, according to the official reference from the Central Medical Library, is 6.2 with a required 5:

JOURNAL	(IF)-TOMPSON REUTERS	(SJR)-SCOPUS
Journal of IMAB	0.2	0.225
Oral Diseases	3,8	0.849
<u>Applied Sciences (Switzerland)</u>	2,7	0.492

The remaining twenty articles bring the candidate 252.56 points according to indicator G of the minimum national requirements and the requirements of UMBALSM "N.I. Pirogov" EAD - Sofia. The citation rate of the presented materials is quite sufficient, indicating 3 from foreign sources from Scopus and Web of Science, 30 from other accessible foreign data and 16 from Bulgarian publications. Self-citations are excluded.

The scientific-metric value of the production presented in the competition is as follows:

A group of metrics	Content	ASSOCIATE PROFESSOR Minimum number of points according to national requirements	Points required according to the requirements of UMBALSM "N.I. Pirogov" EAD - Sofia	Points available according to the candidate's scientometric data provided
A	Indicator 1	50	50	50
B	Indicator 2	-	-	-
C	Indicators 3 and 4	100	100	133
D	Sum of indicators 5 to 9	200 (160 за ПН 7.6)	250	252,56
E	Sum of indicators from 10 to 12	50	50	60
F	Sum of the indicators	-	-	200

	from 13 to the end			
G	IF (applies only to the requirements of UMBALSM "N.I. Pirogov")	-	5	6,2

Dr. Slavkov's scientific works have contributions in the following areas: *maxillofacial, plastic-restorative and reconstructive surgery; microsurgical operative methods; oncology; cancer of the oral cavity; oral pathology; salivary gland tumor; odontogenic tumors; rare diseases; purulent-septic surgery and inflammatory diseases of the face and neck, post-operative care for cancer patients, history of medicine.*

Maxillofacial plastic-restorative and reconstructive surgery in oncological patients.

The state-of-the-art approach to extensive head and neck defects after oncological resections using virtual computer planning, surgical resection/reconstruction simulation, and 3D modeling and printing is explored. The importance of modern equipment, the training and preparation of the medical team has been proven. (1)

The modern concepts in the surgical control of malignant diseases of the deep areas of the oral cavity and pharynx, directly related to the possibilities of adequate anatomical and functional restoration of the removed specific tissues, are described. Severe functional deficits have been overcome using microvascular tissue transfer techniques, and the results are extremely positive in terms of returning surgery to the front line of the fight against some of the most aggressive malignant processes in human pathology. (14,15,16).

The mandibular resections performed most frequently in cases of tumor ablation were analyzed. It has been proven that in oral and maxillofacial surgery, one-stage reconstructions of defects using microvascular transplantations are successful. To restore the form and function of the lower jaw, transplants obtained from the iliac crest and fibula are most often used. Serious experience in one-stage repair of mandibular defects simultaneously with resection using autogenous vascular grafts from the iliac crest and fibula is shared. (18,19)

Microsurgical operative methods

Microsurgical operative techniques that ensure the use of a significant volume of hard and soft tissue have been studied. For reconstruction of complex mandibular defects, vascularized iliac graft is preferred. The exposed postoperative studies with Doppler confirm the vascularization of the transplants, and with computer-tomographic three-dimensional reconstructions - their survival. For the first time in Bulgaria, restoration of large mandibular defects was achieved through vascularized iliac transplants. The results confirm that the method is effective after tumor ablations and give reason to assume that it is also applicable in other cases of bone deficiency.

Oncology

Algorithms have been developed for better diagnosis, treatment and follow-up of patients with salivary gland tumors. The specialist's behavior has been improved, and through a multidisciplinary approach errors have been reduced to a minimum. Standardized follow-up has been introduced, improving patient survival (12,25).

The relationship between HPV and oral carcinogenesis has been studied as between more than 150 HPV subtypes have been identified; more than 40 types of HPV infect the anogenital area and oral cavity. Recommendations for prevention have been made, and every patient with suspicious lesions in the oral cavity is recommended to be tested for HPV. Proposals have been made for HPV status to be incorporated into standard practice in oropharyngeal and oral carcinomas. (3)

Cancer of the oral cavity

The possible side effects of oral cancer treatment on the oral cavity (xerostomia, mucositis, ulceration, radiation caries, osteoradionecrosis, secondary infections) and the ways in which they can be avoided and treated are explored. Early diagnosis allows for a better treatment outcome and prognosis. The choice of treatment depends on the stage of the tumor. The latest treatment options for oral squamous cell carcinoma through monoclonal antibody therapy, oncolytic virotherapy, and IL2 immunotherapy are shown. (3)

The good results of treatment by excision within healthy margins of a granular cell tumor as a rare neonatal lesion located on the alveolar crest were studied. Particular attention is paid to histology and clinical behavior.

Oral pathology

Access to oral health care for patients awaiting liver transplantation was studied and analyzed. A diagnostic protocol has been created for the examination and assessment of oral health and dental status, in relation to their general state of health. The importance of screening patients for liver transplants for active or potentially active foci of infection, which at some stage could compromise the intervention, is emphasized.

Tumor of the salivary glands

The diagnostic value of fine-needle and core biopsy in salivary gland masses is summarized, and the advantages and disadvantages of these two methods are shown. Fine-needle aspiration cytology and core-needle aspiration cytology have been shown to be useful methods for evaluating masses suspected to be of salivary gland origin. It has been described, "the diagnostic accuracy of FNAC can reach 98% when appropriate material is obtained, but the rate of insufficient or nondiagnostic results is as high as 29%. (25)

Odontogenic tumors

Ameloblastoma (adamantine) was studied as one of the odontogenic tumors, which in 80% is located in the body and branch of the lower jaw. Its non-radical removal has been proven to lead to recurrences. It becomes malignant in 1 to 4% and can metastasize. Resection of the jaw, which necessitates subsequent reconstruction, was identified as an important determinant in its treatment. Three reconstructive approaches in the treatment of patients with mandibular ameloblastomas are presented. (20)

Rare diseases

Particular attention is paid to the difficulties in the diagnosis and the good result in the surgical treatment of Eagle syndrome by transcervical access surgery as a rare disease occurring in an elongated styloid process or a calcified styloid ligament. The diagnosis of Eagle syndrome is based on radiological and clinical studies. The most used method of treatment is surgical. Method is shown in which the styloid process can be shortened by an intraoral or transcervical approach. (22)

Another rare disease in the presented materials is actinomycosis as a chronic bacterial infection that causes both purulent and granulomatous inflammation. The disease is described in all three forms: cervicofacial; abdominal; pulmonary. Attention has been drawn to the danger of missing the diagnosis of actinomycosis, as it may mimic neoplasia. Thalassemia is a genetic disease associated with improper formation of hemoglobin. (26)

Intraosseous hemangiomas of the maxilla have been considered as a rare disease. They are mainly described in the craniofacial region in the lower jaw, the zygomatic region and the orbit. The diagnosis is made on the basis of clinical data, histopathomorphological studies, CT, MRI, angiography, Doppler. A surgical treatment protocol was designed and performed, first stage embolization of the feeding vessels followed by resection of the left maxilla. (27)

Other Contributions. History of Medicine.

Studies of the roots of medicine, regardless of whether it refers to surgical or therapeutic specialties, represents a serious contribution to the understanding of the future of this science. Publications devoted to familiarization with the founders of surgery and the role of the physician in some processes of cultural change for society outside of medicine are presented. (9,10,24,28,29,30).

Teaching activity.

Dr. Slavkov teaches in three areas:

Students of medicine and dentistry - certification of practices and internships and conducting exercises of 6th year students at the Department of "Emergency Medicine";

Specialty trainees - management of specialty trainees in the specialties "Oral Surgery" and "Maxillo-Maxillosurgery", participation in committees for conducting colloquiums;

PhD students - preparation of dissertation projects in the scientific specialty "Surgery";

As a supervisor of interns, Dr. Slavkov organizes collegiums on various clinical cases, and as part of the editorial board of "Emergency Medicine" magazine, he helps with the preparation of materials and their presentation for publication.

Conclusion

Based on the significance of the presented materials, their essential scientific and scientific-applied contributions, and considering their scientific-metric value, which exceeds

the requirements of the Law on the Development of the Academic Staff, as well as the requirements of the Regulations for the Development of the Academic Staff of UMBALSM "N .I.Pirogov" EAD - Sofia., I give my positive vote and recommend to the respected members of the scientific jury to support the candidacy of Dr. Svetoslav Slavkov for the academic position of "associate professor" in the scientific specialty "Neurosurgery" for the needs of Maxillofacial Surgery Clinic.

Sofia

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