

To
Chairman of the Scientific Jury
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CITY CLINIC UMBAL TOKUDA EAD

REVIEW

by Prof. Krum Sotirov Katsarov, MD, DSc

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Subject: Competition for the academic position of "Associate Professor" in the Scientific specialty "Gastroenterology" for the needs of the Clinic of Gastroenterology, Department of Interventional Gastroenterology, "Acibadem City Clinic University Hospital Tokuda" EAD

The pioneering role of the candidate for the introduction of cholangiopancreatography deserves special attention, and in particular the so-called SpyGlass systems, which ranks him among the leading European experts in this dynamically developing endoscopic field.

The result of the candidate's in-depth work in this direction is the above-mentioned dissertation, as well as numerous publications in renowned international journals. Dr. Karagiozov is a training expert in cholangiopancreatography with SpyGlass DS, BS for Eastern Europe.

As an expert and principal investigator, the candidate participates in a number of clinical studies related to the evaluation of the clinical efficacy and safety profile of a wide range of drugs - biological therapy for ulcerative colitis and Crohn's disease, PPI in GERD, ASF in the treatment of refractory ascites in liver cirrhosis, V2-receptor antagonists for the treatment of ascites in liver cirrhosis, etc.

The academic career of the candidate began in October 2019 as a part-time lecturer at the Medical Faculty of Sofia University "St. Kliment Ohridski", and in 2020 he held the academic position of "Chief Assistant", in the specialty "Internal Medicine" at "Acibadem City Clinic" UMBAL Tokuda »EAD.

Dr. Karagiozov is fluent in written and spoken German and English.

The candidate participated in the competition with 83 scientific papers, co-authored two monographs, 43 real (full-text) publications in periodicals. From them :

- 10 in refereed editions in English, 4 with impact factor
- 3 in refereed editions in Bulgarian
- 2 in unreferred editions in English
- 28 in unreferred editions in Bulgarian

Dr. Petko Karagiozov has participated with 39 abstracts and reports in scientific congresses in Bulgaria and abroad:

- 19 abstracts of international congresses in English, published in refereed editions with impact factor
- 20 abstracts from Bulgarian congresses and conferences

The candidate presents a PhD dissertation with the relevant abstract.

The analysis of the candidate's scientific output shows that he is the first author in 42 (51.22%) and second author in 21 (25.61%) of the publications. The publications are in authoritative international journals: Endoscopy, World Journal of Hepatology, Endoscopy International, Heart Rhythm Case Reports.

Scientific articles, reports and monographs cover all areas of gastroenterology and could be grouped into the following areas:

I. Interventional endoscopy.

I.1. The candidate's dissertation and related five full-text publications and four abstracts of papers presented at international scientific forums present and analyze the possibilities of digital oral cholangiopancreatography. The published results are based on his own series of patients, divided into four groups depending on the clinical indications in which DPOHP was performed. The results, clinical and therapeutic benefits, as well as the observed complications are analyzed in detail. The study proves that the method does not hide additional risks and is a method of choice in the treatment of those considered "difficult", as well as in identifying missed concretions during routine manipulations. The method is highly effective in diagnosing and building the subsequent behavior in the so-called "Unspecified" bile duct stenosis, mostly as a result of possible visualization and biopsy of the stenosis. The possibility of diagnosis and therapeutic behavior in mucinous neoplasms, strictures and intraductal stones of the pancreas was analyzed.

I.2. Endoscopic techniques used in complications of acute and chronic pancreatitis.

Five publications are devoted to these issues. Two of them consider endoscopic techniques in the treatment of haemosuccus pancreaticus. The main advantage of the publications is the specification of the place of endoscopic techniques in the RHPG complex and angiographic techniques applied in these cases. Three publications consider the possibilities of various endoscopic interventions - papilotomy, stenting of the pancreatic duct, echoendoscopic drainage of peripancreatic collections. The possibilities for combining the different methods in order to achieve an optimal clinical result are also analyzed.

I.3. Echoendoscopy - echoendoscopic drainage techniques.

Two publications discuss the technical aspects and results after echoendoscopic biliary drainage. The possibilities of the method as an alternative to the percutaneous and "classical" RHPG-based drainage are also considered.

The results of transgastric stenting of the pancreatic duct under echoendo control have been published as part of the interventional treatment of pancreatogenic ascites, in case of failure of RHPG based drainage.

The indications and possibilities for liver biopsy under echoendo control in 8 patients are discussed in one publication. Several clinical scenarios have been considered in which the method would be justified - in lesions missed in other research methods, in a synchronous approach - echoendo-assisted biliary drainage and liver biopsy. The benefits of echoendo-navigated fine-needle biopsy with a "histological" needle have been reviewed and discussed in three publications. The candidate's experience in biopsy in three main clinical scenarios is presented - solid pancreatic, mediastinal / pulmonary and mucosal / submucosal formations located in the stomach wall. The main advantages are the high efficiency of the method and the lack of serious complications.

I.4. Endoscopic treatment after iatrogenic complications as a result of interventions in diseases of the gastrointestinal tract and hepatobiliary system.

Three publications are devoted to a complex approach to late-recognized esophageal perforations complicated by empyema and mediastinitis. The presented results consider a complex approach - endoscopic clipping and stenting in combination with video-assisted thoracoscopy, which is a salvage approach in these cases. His own experience in "closing" iatrogenic duodenal and colon perforations is presented in two publications. The author examines in detail the choice of technique depending on the specific situation and the results achieved.

Iatrogenic lesions of the biliary tract are a huge challenge for endoscopists working in biliary pathology. Based on his rich personal experience, Dr. Karagiozov analyzes the possibilities of different methods - RHPG, echoendo, percutaneous drainage methods. In three publications, he demonstrated excellent complex mastery of approaches and their combination and reported a high rate of clinical success (90%) in managing these complications.

I.5. Endoscopic techniques and approaches in diseases of the gastrointestinal tract.

Experience with a combined method for diverticulotomy in Calker's diverticulum is presented. The combination involves the use of a mediastinoscope, an endoscopic stapler in assistance with a pediatric gastroscope. Indications are discussed, as well as an algorithm for switching to flexible, in case of impossibility to perform rigid diverticulotomy.

Two publications presented a protocol for the placement of PEG with jejunal extension in patients with refractory Parkinson's disease and analysis of the results of follow-up of a group of 92 patients for 31 months. Special attention is paid to the quality of life and complications in these patients. Review articles, algorithms, monographs, manuals.

Universal theoretical knowledge and practical skills in the field of gastroenterology and hepatology allow Dr. Petko Karagiozov to discuss and analyze a wide range of diagnostic and therapeutic issues in this field of medical knowledge. Of particular value are the interdisciplinary approaches discussed, together with surgeons, interventional radiologists, resuscitators for complicated diseases of the GIT and hepatobiliary systems. The oncological focus of some of the publications is impressive - behavior in malignant diseases of the pancreas and colon. This section includes 25 publications of the candidate.

II. Participation in National and International conferences with demonstrations of endoscopic procedures "live".

Perhaps the best assessment of the practical skills of Dr. Petko Karagiozov is the invitation and participation in the endoscopic LIVE demonstrations in BULENDO 2013 and BULENDO 2017, where he partnered with leading European experts in the field of gastrointestinal endoscopy. His participation, as a demonstrator in the LIVE demonstrations at the National Conferences and Congresses, undoubtedly increased the level and interest in them.

35 citations are presented, of which 2 are Bulgarian and 33 are foreign Journals (Scopus -7; Web of Science - 14). The publications have a total impact factor of 26,087.

The teaching activity of Dr. Petko Karagiozov is expressed in the training of students, specialists in the field of gastroenterology and gastroenterologists (continuing education). From the attached reference it can be seen that for the period 01.01.2017 - 01.12.2021, the candidate has realized a study load with graduates (in equivalent hours) in the amount of 1136 equivalent hours, of which with graduates 1111 equivalent hours and 25 hours in continuing education. According to the Sofia University "St. Kliment Ohridski", as a part-time lecturer at the Faculty of Medicine, for the period 2019/2020 the candidate has a study employment of 506 hours, of which 36 hours of classroom employment. The same report for the period 2020/2021 shows a study employment of 600 hours, of which 15 hours of classroom employment.

Dr. Petko Karagiozov is an active member of a number of international organizations:

- European Society of Gastrointestinal Endoscopy (ESGE)
- American Society of Gastrointestinal Endoscopy (ASGE);

Privileged Member of the ASGE (Fellow of the American Society for Gastrointestinal Endoscopy-FASGE) from 02.2021

- Member of the Bulgarian Scientific Society of Gastroenterology. Member of The Management Board of BDGE from 2018
- Member of the European Cholangioscopy Study Group (ECG)
- Member of the European Group on Endoscopic Ultrasound (EGEUS)
- Representative of BDGE in UEG Meeting Of Members (since April 2021)
- Training in cholangiopancreatography with SpyGlass DS system, Boston Scientific for Eastern Europe.

- Deputy Chairman of the Commission for granting biological therapy for patients with ulcerative colitis and Crohn's disease at Acibadem City Clinic University Hospital Tokuda EAD, Sofia.

The creative achievements and scientific and applied contributions of the candidate are important for the development and level of gastroenterology and in particular of gastrointestinal endoscopy in Bulgaria and can be presented in the following areas:

1. Research and analysis of the place of DPOHPS in the diagnosis and treatment of diseases of the hepatobiliary system and pancreas and development of an algorithm for application of the procedure. DPOHPS is presented as a new methodology for the country. The study is the first of its kind in the country, conducted on its own pool of patients and compared with the results of other similar developments. The factors determining the increased risk of complications or technical failure are also analyzed. For the first time in the country, an algorithm of interventional behavior in the so-called "Difficult" stones in the bile ducts, as well as a diagnostic algorithm for unspecified biliary stenosis. The candidate is a pioneer in the introduction of endoscopic pancreatoscopy in the country. For the first time in the country, endoscopic cholangioscopy is used in patients with biliary complications after liver transplantation. Dr. Petko Karagiozov shares his experience and analyzes the results of the application of endoscopic cholangioscopy in indications that have not yet been established worldwide - iatrogenic lesions of the urinary tract, migrated stents, missed stones, pancreatic diseases.

2. Gastroenterology and interventional endoscopy.

Interventional gastrointestinal endoscopy is undoubtedly the "element" of Dr. Petko Karagiozov. There are several areas in which he has an indisputable contribution in practical and theoretical terms.

- Endoscopic algorithms in the treatment of complications of acute and chronic pancreatitis - echoendoscopic pancreatic-gastrostomy (the method is presented for the first time in the country), complex (endoscopic and angiographic) treatment of haemosuccus pancreaticus, as well as endoscopic techniques.

- The contribution of the candidate is extremely valuable - as an algorithm of behavior in iatrogenic lesions of the hepatobiliary system and GIT. Complication analysis - causes, response time and method are a visual guide to behavior in these cases. As described, the range of complications covers iatrogenic lesions of the esophagus, colon and hepatobiliary system and illustrates the rich arsenal of practical skills and high theoretical training of the candidate.

- Dr. Petko Karagiozov is one of the few endoscopists in the country who performed a successful drainage intervention in biliary complications of a child after a liver transplant.

- The candidate develops and applies a combined method for oral diverticulotomy in Canker's diverticulum, together with thoracic surgeons.

- The candidate develops a protocol for placement of a percutaneous endoscopic gastrostomy with jejunal extension in patients with refractory Parkinson's disease using his own modified technique of insertion of the jejunal catheter without the need for fluoroscopic navigation. Patients were followed for a period of 31 months. The quality of life and the complications that have been analyzed are analyzed.

3. Gastrointestinal echoendoscopy is a dynamically developing field of gastroenterology in which the candidate has practical / theoretical contributions.

- for the first time in the country was presented echoendoscopic drainage of the bile ducts, in case of impossibility to do, "classic" endoscopic or percutaneous drainage.

- Echoendoscopic pancreato-gastrostomy is also presented for the first time in the country as a salvage procedure in the treatment of pancreatogenic ascites after chronic pancreatitis.

- Based on personal experience, the possibilities of fine-needle biopsy with a "histological" needle under echoendo control were analyzed. The results of biopsy of liver, pancreas, mediastinal and mucosal / submucosal lesions of tumors of the gastric wall are presented. The analysis makes it possible to compare the effectiveness and complications between echoendo biopsy, etc. "Standard" methods used in these cases.

4. The contribution of the candidate in the presentation of modern recommendations, algorithms and practical guidelines in the diagnostic behavior and interventional treatment of malignant biliary biliary obstruction and choledocholithiasis is indisputable. Published reviews and articles are practical guidelines for behavior in the so-called "Difficult" cases in gastroenterology - Barrett's esophagus, pancreatic cancer and chronic pancreatitis, cystic pancreatic neoplasms, diverticulosis of the colon. The candidate has developed and presented his own system for prevention of infection with Covid 19 in the endoscopic sector. I would especially like to highlight the work of Dr. Petko Karagiozov as a demonstrator and lecturer at the LIVE demonstrations held as part of the international forums BULENDO 2013 and BULENDO 2017, as

Based on the excellent theoretical and practical training of Dr. Petko Karagiozov as a gastroenterologist and invasive endoscopist, his serious teaching activity and his numerous scientific publications and developments, significantly exceeding the requirements of ZRASRB and the Regulations for the development of academic staff in Acibadem City Clinic Tokuda EAD, I would like to recommend to the esteemed members of the Scientific Jury to give a positive vote and choose Dr. Petko Karagiozov as "Associate Professor" at the Clinic of Gastroenterology, Department of Interventional Gastroenterology at "Acibadem City Clinic UMHAT Tokuda".

Prepared:

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