**OPINION**

**by Prof. Ognyan Georgiev Brankov, DSc**

**pediatric surgeon, KCHZPH of Acibadem City Clinic UMBAL Tokuda**

**of the dissertation of Dr. Anastasia Petresca**

**RESECTABILITY OF CARCINOMA OF THE HEAD OF THE PANCREAS - BEFORE AND**

**INTRAOPERATIVE CRITERIA**

**Scientific supervisor: Prof. Dr. Kiril Draganov, DSc.**

**presented for the acquisition of the educational and scientific degree "DPhD", in the scientific specialty "General Surgery" professional direction 7.1. Medicine, in the field of higher education 7. Health care and sports**

By order of the Director and the Procurator of Acibadem City Clinic UMBAL TOKUDA ​​No. 15-05-148 of 18.10.22, I am charged with the task of writing an opinion regarding the submitted dissertation work. The same was discussed and directed for protection by an extended scientific collegium of the Clinic for Liver, Biliary, Pancreatic and General Surgery of "Acibadem City Clinic MBAL Tokuda" EAD, convened by order 15-05-100/13.06.2022 of the Executive Director of the hospital.

Biographical data

Dr. Anastasia Petresca graduated in Medicine in 2001 at Sofia University. From 2002 to 2008, she specialized in surgery in the First Department of Surgery at the Aleksandrovska Medical Center. FROM 01.08.2008 UNTIL THE PRESENT, SHE IS A SURGEON IN THE CHILDREN'S EDUCATION OF THE TOKUDA ​​HOSPITAL. Since 2019, she has been a part-time assistant at the Faculty of Medicine of the University of “|St. Kliment Ohridski". Held specializations and courses: laparoscopic surgery (VMA), liver-biliary surgery, pancreatic surgery (at MU – Sofia). She has 2 specializations at Fundeni Hospital, Bucharest, regarding liver transplants (2015, 2016), as well as a course at the Johnson and Johnson Institute, Cincinnati, USA on the use of automatic staplers. She completed the Advanced Theory Course: New Perspectives in Hepatobiliary and Pancreatic Surgery. October 2022 IRCAD, Strasbourg, France

General analysis

The dissertation is written on 144 standard pages. Illustrated with 38 tables and 15 figures. The structure and the way of writing the dissertation are in accordance with all the requirements. The paper is written in high scientific language, accurate and concise, which clearly and comprehensibly expresses the meaning of the content.

The literature review covers the most important publications on the topic, and their detailed analysis shows how deeply the dissertation has penetrated into its essence. The analysis covers 199 sources, all in Latin. In my opinion, due credit should also be given to the Bulgarian classics in this complex matter. The dissertation analyzes the period from the end of the 1930s with Allen O. Whipple's experience with carcinoma of the head of the pancreas, whose method entered practice and became a routine procedure. Despite advanced surgical technique and instrumental technology, modern results in the diagnosis and treatment of CPH have not improved dramatically. The relative share of resectable cases remains in the range of 20 - 25%. Perioperative mortality remains below 5%, while specific morbidity affects almost half of patients undergoing DHPE, and 5-year survival despite a multimodal treatment approach is very low.

The main problem emphasized by the doctoral student is that cases of carcinoma of the pancreatic head, preoperatively assessed as resectable, but intraoperatively proven unresectable, are not rare, which keeps the percentage of exploratory laparotomies high.

Based on the conclusions of the literature analysis, the doctoral student outlines the white spots in the problem and sets herself the GOAL to look for ways to update the preoperative diagnosis so as to reduce the rate of exploratory laparotomies in pancreatic cancer, namely: Analysis of reliability, sensitivity and the specificity of some preoperative clinical, laboratory and instrumental data as predictors of resectability.

In accordance with the purpose of the research, the doctoral student creates a working hypothesis, the essence of which is that the correct and consistent interpretation of information from preoperative anamnestic data and the results of clinical, paraclinical and imaging studies would improve the results of the general treatment approach to cancer of the head of the pancreas. To achieve this goal, 5 tasks have been formulated.

The developments in the dissertation work are based on rich clinical material from 400 operated patients. They were selected from among a total of 695 cases treated in the KCHZPH for the period January, 2007 - December 2019, after inclusion and exclusion criteria were applied. For the needs of the study, the following 7 groups of methods were used: clinical methods, laboratory tests, imaging methods, interventional diagnostic and therapeutic methods, various indicated surgical methods, pathohistological methods and statistical analysis methods.

The analysis and interpretation of these methods, as well as the interpretation of intraoperative findings and postoperative results, allow the doctoral student to draw several important conclusions for practice:

1. The use of the complex of predictors of resectability of CPH can prevent the performance of "unnecessary" explorations

2. Preoperative ERCP and ELP stenting should be routinely performed in all patients with suspected pancreatic head tumor causing mechanical jaundice

3. It is necessary to expand the application of the innovative for our country EUS and EUS-FNA method

4. It is necessary to strengthen the importance of neoadjuvant chemotherapy as well as radiotherapy

13 conclusions of important scientific and scientific-practical value were made, with which the dissertation student achieved an adequate answer to the tasks she set herself in the dissertation work.

The abstract meets the requirements and fully reflects the main results achieved in the dissertation. In an overview and clear way, it gives a summarized idea of ​​the overall design of the work, the methods, the results and the main conclusions. The dissertation student presents a list of 8 scientific papers related to the dissertation topic, which have been published in conference proceedings, as well as in the prestigious scientific journals HIRURGIYA and SCRIPTA MEDICA. She is the lead author in 3 of them, second or third in another 4.

Conclusion

In general, the dissertation work of Dr. Anastasia Petresca is innovative in its conception and excellent in its scientific achievement, which, in my opinion, has no analogue in modern Bulgarian scientific literature on the problem. The author has put a lot of effort into this thorough study, which deserves to be published on its own or as part of a monograph on the problem of carcinoma of the head of the pancreas.

The doctoral student personally conducted the overall development of the clinical material, the analysis of the clinical data and the comparison of the results, as well as personally participated in the majority of the operative interventions. I accept all the 5 contributions cited by her, of which I emphasize the last one: "Routine use of the "ABS" approach in the preparation of the preoperative treatment plan for patients with CPH is suggested."

The examined dissertation work of Dr. Anastasia Simeon Petresca "RESECTABILITY OF CARCINOMA OF THE HEAD OF THE PANCREAS - PRE AND INTRAOPERATIVE CRITERIA" with supervisor: Prof. Dr. Kiril Draganov, DSc, for the acquisition of the scientific and educational degree " PhD", has scientific-theoretical and scientific-practical contributions, some of them innovative in nature, which meet all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for the Development of the Academic Staff of Acibadem City Clinic UMBAL Tokuda.

The work is an original contribution to science, it is written in a tight and correct scientific language and shows that the doctoral student has in-depth theoretical knowledge and high professional skills.

Based on everything that has been said, I give my positive assessment and propose to the honorable scientific jury to award the educational and scientific degree "PhD" to Dr. Anastasia Simeon Petresca.

 Sofia, 07.11.2022

Prof. Dr. Ognyan BRANKOV, DSc