

OPINION
by
Prof. Dr. Ognyan Georgiev Brankov, MD, DSc

Dr. Elmira Momchilova Daskalova

**Pancreato-jejunostomy after duodeno-hemipancreatectomy - types, results,
individual approach of selection**

with scientific adviser: Prof. Dr. Kiril Draganov, MD, DSc for obtaining the educational and scientific degree "PhD" in the scientific specialty "General Surgery" professional field 7.1. Medicine, in the field of higher education 7. Health and sports

The dissertation was discussed and directed for defense by an extended scientific board of the Clinic of Liver, Gall, Pancreatic and General Surgery of Acibadem City Clinic Tokuda Hospital EAD, convened by order 443 / 29.06.2020 of the executive director of the hospital.

Pursuant to Art. 4 of the Law on the Development of Academic Organizations, Art. with Order 570 / 18.09.2020 of the executive director of the hospital I am included in the scientific jury for writing a position paper.

Biographical data

Dr. Elmira Momchilova Daskalova was born on 05.12. 1989. From 2008 to 2014 she studied at the Faculty of Medicine, Medical University - Sofia. From 2015 to 2017 she worked as a doctor in the Department of General Surgery, University Hospital "St. Catherine" - Sofia, and since 2017 she has been appointed as a specialist in the Clinic of Liver-Gall, Pancreatic and General Surgery, Acibadem City Clinic, Tokuda Hospital, Sofia, Bulgaria. In 2015 she was a medical student at the Clinic of General and Abdominal Surgery, University Hospital. Freiburg, Germany.

General analysis

The dissertation consists of 145 pages, illustrated with 25 figures and 33 tables. The studied material used in the dissertation is part of the surgical archive of the Clinic of Liver-Gall, Pancreatic and General Surgery. The Introduction and the literature review include 49 pages, the Purpose and tasks and the Material and

methods - 8 pages, the Survey results - 17 pages, the Analysis and the Discussion of results - 19 pages, the Conclusion - 3 pages. The Bibliography includes 380 sources, of which 22 in Cyrillic and 358 in Latin. The structure and the way of writing the dissertation are in accordance with all requirements.

Significance of the topic

The pancreatic resection surgery in connection with the malignant and benign diseases of the pancreas is still characterized by a very high rate of early postoperative specific complications, in particular postoperative pancreatic insufficiency. Its frequency reaches 60% according to data from leading world centers. One of the main risk factors is the occurrence of pancreatic fistula, which is associated with the method of anastomosis of the pancreatic remnant. In this regard, the choice of an adequate and individually tailored method for reconstruction of the pancreato-bilio-digestive tract is of great importance.

Despite of the wide variety of proposed techniques and modifications, there is no universal way of pancreatic reconstruction, guaranteeing the absence or low frequency of postoperative fistulization. The choice of the type of anastomosis is based on an individual approach and mainly depends on the characteristics of the gland and the preferences of the surgeon.

Structure of the dissertation

Literature review. 380 titles are analyzed, and the leading Bulgarian authors are presented with 22 titles. The main indications for duodeno-hemipaneatectomy (DHPE) are considered in detail, namely the different types of nosological units. They are discussed in detail in view of the tactics of surgical manipulation. The various surgical aspects of the pancreatic anastomosis are also methodically presented.

The types of stenting of the pancreatic anastomosis, the need for routine placement of intra-abdominal drainage and its early removal are highlighted. It is emphasized that the choice of method for pancreatic anastomosis should be based on an individualized approach. An essential part of the review is the analysis of postoperative complications in DHPE. I do not accept the title References of this chapter given by the dissertation.

Of great value is the section Conclusions from the literature review, where the dissertation synthesizes the factors that lead to postoperative fistulization of the anastomosis, as well as the fact that there is no standardized method for pancreatic reconstruction after DHPE.

In sub-item V the dissertation presents the main points of the literature, which makes a smooth transition to the formulated goals and objectives.

Purpose and tasks. The dissertation aims to analyze the factors and characteristics that play a role in choosing the most appropriate method for pancreatojejunostomy after BPE in order to reduce the risk of insufficiency and, accordingly, improve early postoperative results. The dissertation also defines a working hypothesis, which refers to the prognostic risk factors for the occurrence of specific complications in the resection surgery of the pancreas. These factors are generally divided into constants and variables.

To achieve this goal, 10 tasks are listed. They are well formulated and accurate, and are sufficient to achieve the intended goal

I believe that the presented working hypothesis should be set as an introduction to Purpose and tasks, so as not to break the link between them.

Material and methods The clinical material includes 242 cases of duodenopancreatic resections (a modo Whipple / Traverso-Longmire) out of a total of 829 pancreatic resections in different radical or palliative volume, performed for the period 01/01/2009 - 31/12/2019. at the Clinic of Liver-Gall, Pancreatic and General Surgery, Acibadem City Clinic Tokuda Hospital. The patients are divided into 2 groups - with and without postoperative pancreatic fistula (POPF).

The main criteria are defined - including and excluding - on the basis of which the choice of cases is made. There are five groups of methods applied to perform the tasks: clinical, laboratory, instrumental, surgical and statistical.

In the 3rd Chapter Results of Own Studies Dr. Daskalova summarizes the results of the study of 242 patients with duodenopancreatic resections.

In the next chapter fourth, Analysis and discussion of own results, she made a sample of 145 patients with comparable data on the main criteria of the operative procedure and postoperative period. Based on a precise statistical analysis, Dr. Daskalova derives data with a high degree of significance, which she interprets in the context of the set goals and objectives. The percentage calculation of the relative risk and potential risk factors has a high scientific value.

The presentation of the mortality from pancreatic cancer in the USA by years is not sufficiently considered (Fig. 16), as a comparative analysis of this mortality in Bulgaria in the series of analyzed patients has not been performed. I consider table № 17 on cancer mortality in the United States, broken down by gender, redundant.

Conclusion I could not establish a precisely formulated conclusion, but on the other hand, the ten conclusions listed in the dissertation correspond to the set

tasks and represent a synthesis of the developed work with high scientific and practical value.

Summary

The summary meets the requirements and fully reflects the main results achieved in the dissertation. In a clear and concise way, it gives a summary of the overall design of the work, methods, results and main conclusions. Dr. Daskalova presents a list of 2 publications related to the dissertation topic. My recommendation is to present fragments of this material on our and foreign surgical forums.

Personal participation of the doctoral student

The dissertation shows that the doctoral student Dr. Elmira Momchilova Daskalova has in-depth theoretical knowledge and professional skills in the scientific specialty "surgery" by demonstrating qualities and skills for independent research. She personally conducted the dissertation research and the obtained results and contributions are her merit.

Conclusion

The dissertation of Dr. Elmira Momchilova Daskalova "Pancreato-jejunostomy after duodeno-hemipancreatectomy - types, results, individual approach to the choice" with supervisor: Prof. Dr. Kiril Draganov, MD, for the acquisition of the scientific and educational degree "Doctor", has scientific and applied contributions that meet all the requirements of the Law for 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 Tokuda Hospital. The work is an original contribution, written in concise and correct scientific language and shows that the doctoral student has in-depth theoretical knowledge and professional skills for independent research. Based on all the above mentioned, I give my positive assessment and propose to the esteemed scientific jury to award the educational and scientific degree "PhD" to Dr. Elmira Momchilova Daskalova.

Sofia, 07.10.2020

Prof. Dr. Ognyan Brankov, MD, DSc