

STANCE

МЕДИЦИНСКИ УНИВЕРСИТЕТ

ПЛОВДИВ

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from

Prof. Dr Aleksandar Petrov Chervenjakov, DMedSc, Department of Thoracic surgery,
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Subject: dissertation thesis of Dr. Yordan Toshev Tsenovski on "THE ROLE OF LYMPHOVASCULAR INVASION IN THE PROGNOSIS OF OESOPHAGEAL CARCINOMA", prepared on the basis of patients, operated in First surgical clinic of "Pirogov" Hospital, Sofia.

Brief biographical data:

Dr. Yordan Toshev Tsenovski is born on 30.05.1971 in the town of Oryahovo. He graduates in 1995 at the Medical University of Varna as a doctor with Master degree.

From 1996 to 1999, he works as a resident doctor in the Surgical Departments of Vratsa, Oryahovo and Mezdra.

In 1999-2004 he acquires a specialty in General and Abdominal Surgery, undergoing 5 years specialised training in the 2nd surgical clinic of "Pirogov" hospital - Sofia.

During the period of 2004-2010 Dr. Tsenovski works as a resident doctor in the Surgical Department of the hospital of Mezdra.

In 2006 he graduated with a degree of bachelor in Health Management at the Southwestern University "Neofit Rilski" - Blagoevgrad.

In 2010 he is appointed for 3 years as a resident trainee in Thoracic Surgery Department of the 1st Surgical Clinic of "Pirogov" hospital - Sofia, where in 2013 he acquires a degree in Thoracic Surgery. Subsequently, he works in the clinic as a resident for another 3 years. / 2010-2016 /

Since 2013 Dr. Tsenovski conducts the practical exercises in surgery of the health care specialists at the Medical University of Sofia, branch "Prof. Dr. Ivan Mitev" - Vratsa. / 2013-2015 /

Since 2016 to date he works as Head of the surgical Department at the Mezdra hospital and as a resident doctor in the Department of Thoracic surgery at the hospital "G. Stranski" - Pleven.

Dr. Tsenovski is a member of the Bulgarian Surgical Society and the Bulgarian Society of Thoracic and Cardiovascular Surgery.

Since 2015, he is member of the advisory board for thoracic surgery at the Bulgarian Medical Union.

He has 95 scientific publications until now and participations in medical forums.

Relevance of the topic: Oesophageal cancer is one of the most aggressive visceral tumours. The ratio of adeno to squamous cell carcinoma changes. Due to the specific structure of the lymph flow of the oesophagus, new staging methods are sought in order to assess the prognosis and treatment of the disease. A number of authors note that the last eighth classification of the TNM system of AJCC and UICC from 2017 is not satisfactory and sufficiently complete to take into account all the factors characterizing oesophageal cancer. Currently, the difference is determined by the G-stage of the disease. Isolated tumour cells (ITCs) are single tumour cells or groups of cells no larger than 0.2 mm that can be routinely detected with HE or immunohistochemically. The criteria for the number of cells that form a group remains unresolved. They are determined from less than 200 cells to less than 20 cells per group according to different authors. The concepts of "skip metastasis" and lymph node ratio have been introduced. All these criteria are used to determine prognostic groups of the disease and the prognosis dependent on the preoperative therapy. The determination of the lymphatic vascular invasion in GIT tumours is increasingly used as a postoperative prognostic factor.

General characteristics of the submitted dissertation thesis

The submitted thesis is written on 192 standard typewritten pages:

1. Title page, content and introduction - 3 pages.
2. Review of the relevant literature - 63 pages.
3. Purposes and tasks - 1 page
4. Materials and methods - 64 pages
5. Results - 6 pages.
6. Discussion - 29 pages.
7. Conclusions - 2 pages
8. Bibliography containing 178 authors - 17 pages.
9. The dissertation thesis is illustrated with 55 figures, 7 tables and 7 microscopic photos.

The review of the relevant literature reflects the problem comprehensively, in many ways and with modern ideas about the pathogenesis and diagnosis of the oesophageal cancer. The staging, the importance of lymphatic dissection and the need to improve the evaluation of the tumour in order to determine the treatment and prognosis of the disease are discussed in detail. As a disadvantage, I consider the fact that only 5 authors are presented in Cyrillic.

The purpose and the tasks are clearly stated.

In chapter "Materials and methods" the clinical experience of 188 patients with oesophageal cancer, operated within 6 years, is exposed. The type and volume of the performed lymph dissection are indicated. The essence of the present work is the study of the lymphovascular invasion in 50 of these patients.

The obtained results determine the frequency and location of metastases in the dissected lymph nodes. The percentage of skipping metastases and invasion of the paraoesophageal lymph vessels is indicated. Lymphatic invasion has been reported in all cases of lymphogenic metastases. However, the intensity of embolization does not always correspond to the size and number of metastatic lymph nodes. The detection of tumour emboli increases by conducting serial examinations in peritumoral and perinodal tissues.

The discussion is presented on 29 pages and follows the pattern of the analysis of the relevant literature and the data from the obtained results. The latter are comparable to the generally accepted standards for staging oesophageal cancer.

The conclusions are correctly formulated and correspond to the objectives proposed, fully outlining the purpose of the dissertation.

I consider as contributions:

1. The detailed relevant literature review on the staging and lymphogenic metastasis of the oesophageal cancer.
2. The proposed scheme for assessment of the lymphatic metastasis with a scheme for mapping of lymphatic dissection.
3. The elaborated algorithm for performing D1, D2 and D3 lymph dissection.
4. The emphasis on the importance of the study of the lymphovascular invasion for the conduct of the adjuvant therapy and the prognosis of oesophageal cancer.

The abstract meets the requirements for a doctoral thesis and reflects the main results achieved in the dissertation.

Four articles are published, presenting the scientific work done for the preparation of the dissertation. The obtained results were presented at 7 scientific forums.

CONCLUSION:

The submitted dissertation thesis "The role of lymphatic vascular invasion in the prognosis of oesophageal carcinoma" is the first Bulgarian study, analysis and evaluation of the opportunities for improving the staging of oesophageal cancer. It definitely proves the need for timely histological verification, topographic anatomical assessment and staging, using lymphovascular invasion for the treatment and prognosis of the disease.

The dissertation thesis of Dr. Yordan Tsenovski fully meets the criteria for awarding the scientific and educational degree "Doctor" and fulfils all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the relevant Regulations of the Medical University – Plovdiv.

Having regard to the foregoing, I give a positive vote and recommend to the esteemed members of the scientific jury to award Dr. Yordan Toshev Tsenovski the educational and scientific degree "Doctor".

Prof. Dr Aleksandar Petrov Cherveniyakov, DMedSc

