

OPINION

By Assoc. Prof. Dr. Maria Velichkova Yunakova, MD, PhD

Department of Obstetrics and gynecology, Faculty of Medicine, Medical University – Sofia

SBALAG Maichin dom/Medical complex Dr. Shterev

On the Dissertation of Dr. Radko Emanuilov Totsev: "Robotic myomectomy. Comparative analysis of clinical results compared with those with open and laparoscopic access" for obtaining PhD degree in scientific specialty "Obstetrics and Gynecology", in the field of higher education 7. Healthcare and sport, professional direction 7.1. Medicine.

The opinion is prepared on the basis of the provided Dissertation work and the demonstrated publication activity. The dissertation is designed according to the requirements for the structure of a scientific work, according to the Development of the Academic Staff Act in the Republic of Bulgaria and the Regulations for the Terms and Conditions for the Acquisition of Scientific Degrees and Academic Positions at the Medical University -Varna. The dissertation covers a total of 157 standard computer pages. The presented results are illustrated with 60 tables and 35 graphs. The structure of the dissertation work includes: introduction, literature review, aim and objectives, materials and methods, results and discussion, conclusions, contributions and bibliography.

In the introduction, the author proves the importance of the problem of surgical treatment of the most common benign disease of the female genital tract - uterine fibroids. The three main types of surgical approach to its treatment are presented - open abdominal, laparoscopic and robot-assisted myomectomy, including a historical review is presented.

The literature review presents a study and comparative analysis of the world and Bulgarian experience of surgical treatment of uterine fibroids through different operative approaches,

the advantages and disadvantages of each, the indications for choosing one or another approach and comparing the results. 357 sources are covered. Through an analytical review of publications related to the topic, Dr. Tocev proves the relevance of the problem, both on a national and global scale. Among the cited sources, foreign language sources predominate, most of which are from the last 10 years. In this way, the up-to-date analysis of the problem is guaranteed. The literature review presents the main points of discussion in the examination of the topic. The review is comprehensive enough with a number of multicenter randomized clinical trials cited.

The set goal is sufficiently clear and specifically defined. The present work aims to investigate the place of robot-assisted myomectomy in the surgical treatment of uterine fibroid disease based on preoperative parameters and in comparison with those of other operative approaches. To achieve the goal, 6 tasks have been set. The set tasks fully correspond to the goal.

Clinically significant perioperative indicators such as operative time, hospital stay, postoperative complications when applying robotic myomectomy were studied. They were compared with the same indicators for the other two surgical approaches. The factors that influence the studied indicators - number, size and location of fibroids, BMI of the patients, relationship were studied. An economic analysis of the costs of the three types of operational approach was also made. Based on the results, the location of the robotic myomectomy was also investigated.

Regarding the materials and methods used, a retrospective study of 300 patients was conducted, and the collected data reflect the trends in real clinical practice. The reliability and statistical significance of the results are guaranteed by the large number of patients studied in the groups, which is of crucial importance, especially in retrospective studies. Inclusion and exclusion criteria were clearly defined and numbers (100 for each group) ensured similar

patient populations across the three groups while minimizing the risk of data errors and biases.

The obtained results are presented clearly and comprehensively, being illustrated with appropriate figures and tables. After the presentation of the results, a comprehensive commentary is attached, discussing the reasons for the observed results.

They are interpreted through data of published international research in the field. The results confirm the undisputed place of laparoscopic surgical treatment of fibroid disease as the gold standard in terms of all perioperative indicators. Significant advantages of robot-assisted such as image enhancement at the expense of 3D panoramic vision, rich wrist instrumentation, tremor filtration, and motion scaling are brought out. The advantages of the approach such as low morbidity and conversion risk, short hospital stay have been proven.

The conclusions in the dissertation are 7 in number, and they are precisely and clearly presented. The indications for the application of each of the studied operative approaches for operative treatment of uterine myoma to achieve the best perioperative results are clearly defined, incl. economic dimensions. Formulated conclusions can be used as an algorithm for choosing an operational approach.

The present work provides scientific-theoretical, scientific-methodical and scientific-applied contributions in the process of determining the importance and place of robot-assisted myomectomy. The comparison of the results of three operative approaches to myomectomy and the recommendations for choosing an approach depending on the location, size and number of fibroids are original. Robot-assisted myomectomy should be first choice for high BMI patients, fibroids localized in uterine cervix and those with a size of 7-10 cm. Data on the economic dimensions of the choice of a surgical approach are of a confirmatory nature.

In conclusion, the presented dissertation work on the topic "Robotic myomectomy. Comparative analysis of clinical results, compared with those in open and laparoscopic

access" has a high value and scientific-practical application on a current problem in clinical practice.

I recommend to the members of the jury to vote positively for awarding with a PhD degree in the scientific specialty "Obstetrics and Gynecology" Dr. Radko Emanuilov Totsev.

Sofia, 5.03.2023

Assoc. Prof. Dr. Maria Yunakova

