

Position Statement

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On the Dissertation Work

"Body Contouring in Patients with Obesity and After Massive Weight Loss"

by Dr. Evgeni Vanyov Sharkov

for the award of the academic and educational degree "Doctor" in the scientific specialty "Surgery"

Scientific Advisor: Assoc. Prof. Dr. Alexander Kamennov Zlatarov, PhD

The dissertation has been discussed and approved for public defense by the Departmental Council of the Department of General and Operative Surgery, Medical University – Varna, with decision No. 11/21/10.2024.

The topic of the dissertation is relevant and suitable for dissertation work. The set of included materials and methods is comprehensive, allowing for accurate assessment in the selection of surgical techniques to achieve optimal results and minimize the risk of postoperative complications.

The dissertation is presented in a volume of 211 pages and contains 19 tables and 40 figures.

The literature review is well-structured with the following sections: Introduction, Obesity and Overweight, Massive Weight Loss, Classification of Surgical Techniques, Surgical Treatment Methods, Complications – Prevention and Management, Aim and Objectives, Materials and Methods, Results and Discussion, Conclusions, Contributions, List of Publications Related to the Dissertation, Bibliography. The diversity of surgical techniques described is particularly notable and carefully selected based on the preoperative status.

The candidate clearly formulates the aim: **To prove the relationship between adequate preoperative assessment and preparation with improved results from the surgical intervention.**

To achieve this goal, the following objectives were set:

1. To perform a retrospective analysis of patients who underwent surgical interventions from 2015 to 2021 at the Clinic of Plastic, Reconstructive, and Aesthetic Surgery at UMHAT "Alexandrovska" EAD, based on specified criteria.
2. To summarize the data through statistical analysis and identify the derived correlations.
3. To develop an algorithm for conducting the specified surgeries.
4. To provide recommendations for avoiding complications in these surgeries.

5. To establish indicative criteria for patient inclusion based on preoperative local and general status, for the selection of a specific surgical technique.

Dr. Sharkov's research was conducted at the UMHAT "Alexandrovska" EAD – Sofia, covering the period from 2015 to 2021, with a total of 234 surgical interventions.

To address the set tasks, Dr. Sharkov applies a range of methods to the patients included in the study, highlighting the scientific merits of the work. The list of selected surgical methods is comprehensive and detailed, including: Abdominoplasty, Brachioplasty, Gluteoplasty, Breast Contouring in Patients After Massive Weight Loss, Upper Body Lift, Lower Body Lift – Thigh/Buttock Lift combined with High Lateral Tension Abdominoplasty, Thigh Lift, Facelift and Neck Lift Procedures, Liposuction in Obese Patients, and Radiofrequency Minimally Invasive Techniques.

The results are presented in an appropriate analytical format. From 2015-2021, patients who underwent excisional procedures for body contouring were mostly those who had lost or undergone massive weight loss, while those who underwent body contouring procedures using liposuction techniques were mostly younger patients without comorbidities or previous surgeries.

The discussion logically follows the structure of the Results chapter. The conclusions summarize the findings from the study:

1. Patients undergoing excisional procedures for body contouring were mainly those who had lost or undergone massive weight loss, while patients undergoing liposuction techniques for body contouring were primarily younger patients without comorbidities or prior surgeries.
2. Adequate preoperative assessment, including laboratory tests and comorbid conditions, is associated with a statistically significant lower risk of postoperative complications.
3. An inverse relationship was observed: in men with obesity or after massive weight loss, changes were generally distributed across the entire body, whereas in women, the changes were more often localized to one or two areas, and rarely generalized.
4. The method of weight loss is statistically significantly correlated with the age of the patients.
5. Preoperative findings are statistically significantly correlated with the gender of the patients.
6. The method of weight loss predetermines the local status.
7. Local status predetermines the choice of surgical technique.
8. The complication rate is not directly related to preoperative BMI, as high BMI values often result in the rejection of the surgical intervention.
9. The complication rate depends on the degree of invasiveness.
10. A direct relationship and logical sequence exist between preoperative planning and surgical execution, considering gender, age, BMI, weight loss method, and local status, which subsequently influences the choice of surgical technique.
11. Adherence to this preoperative algorithm results in a low percentage of postoperative complications.

The contributions of the dissertation are as follows:

1. For the first time in Bulgaria, a predictive model has been developed based solely on age, gender, BMI, and weight loss method, to guide the choice of technique.
2. For the first time in Bulgaria, an algorithm has been proposed, the adherence to which, based on the preoperative local status, minimizes postoperative complications.
3. For the first time, an algorithm has been proposed that, even with limited in vivo consultations, can predict the type of surgical intervention through online telemedicine, thereby determining the duration, surgical plan, and necessary facility – public or private – for optimal results.
4. For the first time in Bulgaria, an algorithm has been created that offers direct economic benefits for the relevant clinic and structure in terms of planning the surgical schedule.
5. For the first time in Bulgaria, an algorithm has been created that finds immediate benefits for conducting medical services under pandemic conditions.

Dr. Evgeni Vanyov Sharkov is a proven specialist in Plastic, Reconstructive, and Aesthetic Surgery. Dr. Sharkov conducts training for doctors in Bulgaria and abroad. The dissertation is of significant scientific and practical value. Based on this, I have the right to propose to the esteemed Scientific Jury to award Dr. Evgeni Sharkov the academic and scientific degree "DOCTOR."

Varna,

22.11.2024

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