

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 both relevant and suitable for a doctoral thesis. The set of included materials and methods allows for a precise evaluation of the choice of surgical technique in patients after massive weight loss and in patients with obesity.

The dissertation is presented in a volume of 211 pages and contains 19 tables and 40 figures. It includes the following chapters: Literature Review (7 pages), Aim and Objectives (136 pages), Materials and Methods (137 pages), Results and Discussion (145 pages), Conclusions (203 pages), Contributions (207 pages), List of Publications Related to the Dissertation (209 pages), Bibliography (210 pages). The bibliography includes 51 references.

The literature review is well-structured. The abundance of surgical techniques, which are precisely described and selected based on the preoperative status, is impressive. The inclusion of minimally invasive techniques aimed at optimizing outcomes is one of the advantages of the presented work.

The dissertation clearly defines its aim: **To prove the relationship between adequate preoperative assessment and preparation and the improved outcomes of the performed intervention.**

To achieve this goal, the following objectives were set:

1. To conduct 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 the specified criteria.

2. To summarize the data through statistical analysis and identify the derived correlations.
3. To develop an algorithm for performing the indicated surgeries.
4. To provide recommendations for avoiding complications during these surgeries.
5. To develop indicative criteria for selecting patients for specific surgical techniques based on their preoperative local and general status.

Dr. Sharkov's study was carried out at the structures of UMHAT "Alexandrovska" EAD – Sofia, covering the period from 2015 to 2021 and involving a total of 234 surgical interventions.

To address the set objectives, Dr. Sharkov applies a range of methods, including various surgical techniques: Abdominoplasty, Brachioplasty, Gluteoplasty, Body contouring in the chest area in patients after massive weight loss, Upper Body Lift, Lower Body Lift – Thigh/Buttock lift in combination with High Lateral Tension Abdominoplasty, Thigh lift, Facelift, and neck lifting procedures, Liposuction in patients with obesity, and Radiofrequency minimally invasive techniques.

The results are presented in an appropriate analytical format. Over the period from 2015 to 2021, patients who underwent excisional procedures for body contouring were primarily those who had experienced weight loss or massive weight loss, whereas those who underwent body contouring using liposuction techniques were primarily younger patients without comorbidities or previous surgeries. The subsequent 3-year follow-up showed an 8% rate of early and late postoperative complications in the overall cohort.

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

1. Patients undergoing excisional procedures for body contouring were primarily those who had experienced weight loss or massive weight loss, while those undergoing body contouring via liposuction techniques were predominantly younger patients without comorbidities or previous surgeries.
2. Adequate preoperative assessment, including laboratory tests and comorbidities, is associated with a statistically significant lower risk of postoperative complications.
3. An inverse relationship is observed, where in men with obesity and/or massive weight loss, the changes are predominantly generalized across the body, while in women, the changes are more often localized to one or more areas, but rarely generalized.
4. The choice of weight loss method is statistically significantly associated with the age of the patients.
5. Preoperative findings are statistically significantly associated with the gender of the patients.
6. The choice of weight loss method predetermines the local status.
7. Local status predetermines the choice of surgical technique.
8. The complication rate does not directly depend on the preoperative BMI, as high BMI values are a reason for 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. Following this preoperative algorithm leads to 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 on which the choice of surgical technique can be guided solely by age, gender, BMI, and weight loss method.
2. For the first time in Bulgaria, an algorithm has been proposed that, when followed, minimizes postoperative complications by aligning the choice of technique with the available local status.
3. For the first time, an algorithm has been proposed that allows the prediction of the type of surgical intervention via online telemedicine, even with limited in vivo consultation opportunities, which in turn predicts the duration, daily surgical plan, and necessary infrastructure – state or private – for optimal results.
4. For the first time in Bulgaria, an algorithm has been developed with immediate economic benefits for the clinic and structure in terms of planning the surgical schedule for the day.
5. For the first time in Bulgaria, an algorithm has been developed that provides immediate benefits in the delivery of medical services during pandemic conditions.

Dr. Evgeni Vanyov Sharkov is a recognized specialist in **Plastic, Reconstructive, and Aesthetic Surgery** with many years of experience in body contouring and related surgical techniques. The dissertation is of high scientific and practical value. Based on this, I have the right to propose to the esteemed Scientific Jury the awarding of the academic and scientific degree "DOCTOR" to Dr. Evgeni Sharkov.

Varna,

21.11.2024

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Заличено на основание чл. 5, §1, б. „В“ от Регламент (ЕС) 2016/679
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