

### **Does Obesity Forbid Robotic Gynecological Surgeries? An Urban Legend**

Christos Iavazzo<sup>1</sup>, Kalliopi Kokkali<sup>1</sup>, Alexandros Fotiou<sup>1</sup>, Helen Trihia<sup>2</sup>, George Vorgias<sup>1</sup>

<sup>1</sup>Gynecologic Oncology Department, Metaxa Cancer Hospital, Piraeus, Greece

<sup>2</sup>Pathology Department, Metaxa Cancer Hospital, Piraeus, Greece

#### **Abstract**

*Introduction:* Obesity is a worldwide problem that considered to be a challenge in optimal surgical management. A breakthrough in the technologies of minimal invasive surgery over the last ten years has turned robotic approach into the widespread method for surgical management of obese population. Aim: In this study we emphasize the benefits of the robotic assisted laparoscopy versus open laparotomy and conventional laparoscopy in obese women with gynecological disorders.

*Methods:* We conducted a single center experience retrospective study of obese women (BMI > 30 Kg/m<sup>2</sup>) that underwent robotic assisted gynecologic procedures from January 2020 till January 2023. "Iavazzo" score was used in order to predict preoperatively the feasibility of robotic approach as well as the overall operative time. The perioperative management as well as the postoperative course of obese patients were documented and analyzed.

*Results:* 93 obese women underwent robotic surgical management for benign and malignant gynecological disorders. 62 of these women had BMI between 30 and 35 kg/m<sup>2</sup> and 31 had BMI > 35 kg/m<sup>2</sup>. None of them was converted into laparotomy. All of the patients had a smooth postoperative course without any complications and were discharged at the first postoperative day. Mean operative time was 150 min.

*Conclusions:* Our 3-year experience in robotic-assisted gynecologic surgery in obese patients has revealed numerous benefits concerning perioperative management and postoperative rehabilitation.

**Key words:** obesity, gynecologic disease, robotic surgery, laparoscopy, laparotomy