

# Synergizing health: combined gynecological and bariatric robotic surgery for endometrial cancer in obese women

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Endometrial cancer is the most common gynecological tumor, with approximately 10 200 new cases in 2022 in Italy.<sup>1</sup> Its incidence is on the rise, possibly linked to undefined factors, with many attributing it to the increasing rates of obesity in high-income countries. This is not an unreasonable assumption, considering the correlation between obesity and the general risk of cancer, as well as the effects of unopposed hyperestrogenism due to inadequate progesterone production from adipose tissue.<sup>2</sup>

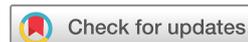
Strong evidence from the literature underscores the health benefits of weight reduction. It is particularly noteworthy for women with precancerous lesions and early-stage tumors who wish to conceive.<sup>3</sup> Rapid and significant weight loss can be achieved through bariatric surgery, and the combination of minimally invasive robotic surgery with sleeve gastrectomy seems to be a promising option for severely obese women (body

mass index (BMI) >35 kg/m<sup>2</sup>) (Figure 1). This choice is supported by the minimally invasive approach recommended for endometrial cancer and the surgeon's comfort with the robotic technique in severely obese patients<sup>4</sup> (Online Supplemental File 1).

Our experience has shown a significant and swift weight reduction in patients treated with this combined approach, which is often difficult to attain with various diets. Notably, patients typically have a history of repeated and prolonged attempts at various diets with no success. The surgical procedures have been free of short- and long-term complications, and adding the bariatric component to laparoscopy has not increased transfusion requirements or the need for intensive care. The average length of stay in hospital was about the same for patients with and without bariatric surgery, with similar times for dietary refeeding, recovery of other bodily functions

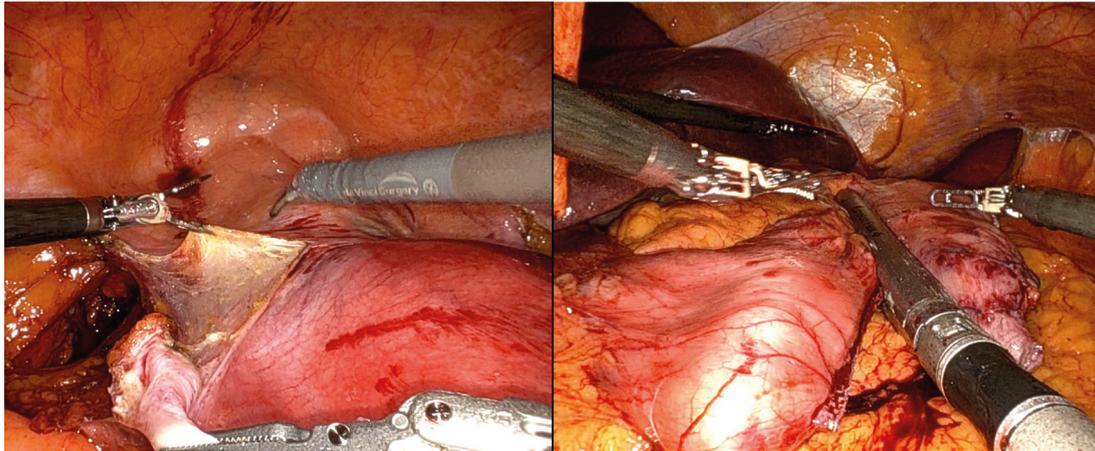


**Video 1** Synergizing health: combined gynecological and bariatric robotic surgery for endometrial cancer in obese women.



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**Figure 1** (Left) Robotic Assisted Total Hysterectomy: dissection of the left round ligament and development of the vesico-uterine plica. (Right) Sleeve gastrectomy using a linear mechanical stapler.

such as bowel and urinary function, drain removal, and pain management.

However, it is essential to underline the patients' limited compliance with accepting the combined procedure, with only 3 out of 13 patients potentially eligible for bariatric surgery. The reasons were not investigated with specific tools, but the consistent responses included the illusion that yet another diet could change their weight without resorting to bariatric surgery, and a lack of full awareness of their overweight status and its implications for their overall health.

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**Synergizing Health: Combined Gynecological and Bariatric Robotic Surgery for Endometrial Cancer in Obese Women – APPENDIX A**

- Scalpel;
- Kocker Forceps;
- Klemmer Forceps;
- Farabeuf Retractor;
- Needle Driver;
- Kii Fios First entry, Applied Medical;
- Indocyanine Green;
- V-Lock 180, 2-0;
- Collin Speculum;
- Hegar Cervical Dilatator;
- Tenaculum Forceps Pozzi;
- Hohl Uterine Manipulator;
- Elefant Suction Irrigation Device;
- Da Vinci Xi Robotic Surgical System;
- AirSeal iAS12-100LPi;
- AirSeal ASM-EVAC1;
- Harmonic Laparoscopic Shears;
- Endoscopic Linear Stapler.