Letter to the Editor

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Safety and feasibility of robotic surgery in selected ovarian cancer patients undergoing interval debulking surgery

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With a great deal of interest, we read the article entitled "Robotic-assisted interval cytoreductive surgery in ovarian cancer: a feasibility study" by Carbajal-Mamani et al. [1]. The study retrospectively examined 12 patients who underwent interval cytoreductive surgery, with complete cytoreduction achieved in 75% of patients. The main advantages of the approach were minimal blood loss (100 mL), and length of hospital stay (2 days). Two robotic cases with upper abdominal disease required conversion to open laparotomy to achieve optimal cytoreduction. Regarding short-term outcomes, only one patient had a postoperative port-site hernia. No long-term outcomes or outcomes related to safety were presented because of the small median follow-up time (9.5 months).

The INTERNATIONAL MISSION study concluded that minimally invasive techniques could be used in patients with ovarian cancer undergoing interval cytoreductive surgery; however, this approach was feasible only for low-complexity standard cytoreductive procedures [2]. Moreover, a recent meta-analysis revealed that the minimally invasive approach resulted in less estimated blood loss and a shorter hospital stay, but the authors failed to clarify the oncological safety of the technique, and rates of disease recurrence via a sub-analysis based on stage or histologic type [3]. Another meta-analysis showed that complete cytoreduction could be achieved in 74.5% of patients in the minimally invasive surgery group compared to 53.10% in the laparotomy group. Questions could be raised regarding potential patient selection bias in the minimally invasive group since some individuals demonstrated a complete clinical response to chemotherapy and lower tumor loads on diagnostic laparoscopy [4].

The well-designed Carbajal-Mamani et al. [1] study is similar and focused on 57 patients with ovarian cancer who underwent robotic interval cytoreductive surgery. Eighty-two percent achieved complete cytoreduction [5]. This study showed that the robotic approach did not adversely affect overall survival. The median survival in the pre-robotic era was 37.9 months versus 42.8 months in the robotic era. Progression-free survival was 11.9 months in the pre-robotic era versus 16.5 months in the robotic era group. The conversion rate was 10.5% and no port-site metastases were described.

Traditionally, debulking surgery is performed via laparotomy. However, patients with a complete response to neoadjuvant chemotherapy may achieve complete cytoreduction with less-invasive surgery and may, therefore, be selected for minimally invasive techniques. We agree that complete cytoreductive surgery, using a robotic approach, is safe and feasible in these patients when performed by highly trained gynecological oncologists in selected tertiary care centers. However, concerns that require further clarification may include intra-operative spillage, port-site metastases, suboptimal cytoreduction in cases of upper abdominal disease, and the adequacy of lymph node dissection, bowel surgery,

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diaphragmatic stripping, splenectomy, or widespread upper abdominal surgery.

Based on the encouraging data of the above-mentioned studies, well-powered multicenter randomized trials should be considered. Such trials would overcome the limitations inherent to retrospective single-center findings. However, based on the recent negative results of Laparoscopic Approach to Cervical Cancer (LACC) trial, it is questionable if and when the Gynecological Oncology Society would proceed with such an effort.

Conflict of interest

No potential conflict of interest relevant to this article was reported.

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