

## Editorial



# Where is ERAS in the management of advanced ovarian cancer?: between myths and truths

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Greggi and colleagues [1] recently published an article evaluating the adherence rates of Italian centers to the Enhanced Recovery After Surgery (ERAS) recommendations in the perioperative management of ovarian cancer. It was a nationwide survey which revealed an overall adherence to the ERAS components of 61.3% and a significant positive correlation between the European Society of Gynaecological Oncology-Quality Indicators (ESGO-QIs) scores and adherence to the ERAS Society recommendations.

Ovarian cancer surgeries are in many ways distinctly different from other surgical fields. Patients often have advanced diseases at diagnosis requiring complex surgical procedures, and surgeons often have to make decisions to execute particular surgical procedures intraoperatively, which makes it hard to predict the optimal postoperative management beforehand. Previous studies reported that large bowel resection, diaphragm stripping, small bowel resection, and surgery on the liver or spleen are needed in order to achieve complete gross resection during upfront primary cytoreductive surgery in about 50%, 40%, 20% and 20% of patients with advanced ovarian cancer, respectively [2]. Even after achieving complete resection by extensive and laborious surgical procedures, it is essential for a patient to have the optimized recovery in order to start her adjuvant treatment without delays [3]. Due to aforementioned reasons such as extensive and unpredictable surgical procedures including multivisceral resections, high risk of postoperative morbidity, and advanced disease status at diagnosis, which may contribute to patients' poor nutritional status, implementing ERAS protocols in ovarian cancer patients may be challenging. In addition to those, another challenge in implementing ERAS protocols in ovarian cancer patients is the fact that most evidence to support the benefits of the guidelines has been mainly derived from either observational studies or based on findings from other surgical disciplines, mostly colorectal surgeries [4]. The medical conditions of ovarian cancer patients may differ from those of colorectal cancer patients. For example, the majority of patients with advanced ovarian cancer experience gastro-intestinal symptoms including abdominal bloating and dyspepsia due to ascites and extensive tumor deposit, which can contribute to delayed gastric emptying time [5]. This may not be present in colorectal cancer patients whose extent of disease spread is often localized. This emphasizes the necessities of performing scientific evaluation of ERAS protocols in this specific group of patients with ovarian malignancies. Despite the paucity of clinical trials assessing the benefits of ERAS protocols in ovarian cancer patients,

evidence from studies to date support the implementation of ERAS protocols in ovarian cancer by demonstrating better perioperative outcomes [6]. Although it remains unanswered yet whether these better perioperative outcomes will eventually lead to better survivals, the current evidence is consistently showing its benefits.

As important as establishing sound scientific evidence for ERAS protocols in ovarian cancer patients is building a close team working environment for multidisciplinary approach and performing continuous audits with the aim of consistent improvement of care [7]. Patient care must be regarded as a continuum involving preoperative consultants, gynecologic surgeons, anesthesiologists, nursing staffs, and dieticians. Clear consensus among them and participating members' dedication are necessary for the success of the program.

Consistent uptake of the ERAS principles in ovarian malignancies has been slow and few centers are performing continuous quality improvement to ensure reliable compliance. In regards to this, the article by Greggi and colleagues [1] provides a valuable insight to assess how ERAS protocols are being implemented not only in Italy but perhaps worldwide. For many people, the very word "myth" is synonymous with "falsehood." However, the opposite may be true. Myths are those stories that shape our understanding of reality. The place of ERAS in the management of ovarian cancer patients might be seen as myths initially but growing evidences demonstrate enhanced patient outcomes [6,8,9]. Thus, professionals across the breadth of gynecologic oncology who care patients with ovarian cancer should continue their scientific endeavor and commitment to an ongoing process of monitoring and auditing this program.

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