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Title

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Permalink

<https://escholarship.org/uc/item/9h0850zr>

Journal

Journal of Gynecologic Oncology, 32(3)

ISSN

2005-0380

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Publication Date

2021-05-01

DOI

10.3802/jgo.2021.32.e51

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Peer reviewed

Editorial



OPEN ACCESS

Received: Feb 17, 2021

Accepted: Feb 19, 2021

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Conflict of Interest

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

Author Contributions

Writing - original draft: C.S.J.; Writing - review & editing: C.S.J., F.C., B.R.E., C.D.S., C.W.A.

Rectosigmoid resection by gynecologic oncologists versus colorectal surgeons: as long as it catches the mouse, does the color of the cat matter?

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► See the article “Rectosigmoid resection during Visceral-Peritoneal Debulking (VPD) in patients with stage IIIC-IV ovarian cancer: morbidity of gynecologic oncology vs. colorectal team” in volume 32, e42.

The paradigm of surgical treatment for advanced ovarian cancer has evolved over the past few decades. Survival of patients with advanced ovarian cancer correlates most directly with the extent of post-operative residual disease although survival determinants are multi-factorial. Currently, the definition of optimal cytoreduction is leaving no macroscopically visible residual disease, which should be the ultimate objective of a definitive cytoreductive attempt. To obtain this, the acceptance of pursuing more radical resection technique is increasing within the gynecologic oncology community worldwide [1-3].

Peritoneally dominated tumor dissemination patterns with infiltration of the adjacent viscera are pathognomonic for epithelial ovarian cancer. The rectosigmoid colon is one of the most commonly involved organs and rectosigmoid resection is often needed as part of the cytoreductive surgical procedures to achieve complete cytoreduction. Since Hudson and Chir described the technique of en bloc rectosigmoid resection, many gynecologic oncologists have demonstrated the clinical feasibility and safety of this procedure [4,5]. However, not all gynecologic oncology surgeons independently perform rectosigmoid resections and even fewer the subsequent colorectal anastomosis. A recent international survey investigating the practice patterns of ovarian cancer surgery reported that only 51% of gynecologic oncologists independently perform colon surgery [6]. This is probably due to the differences of training in bowel surgery between countries. In many countries, it seems that a robust gynecologic oncology fellowship or dedicated subspecialty program including training in gastrointestinal procedures is not well established. So often, colorectal surgeons or surgical oncologists are frequently performing the gastrointestinal part of the ovarian debulking. Medicolegal and

governance aspects and challenges are additional reasons why often the colorectal part of the ovarian debulking is not being performed by dedicated gynecologic oncologists, but rather their colorectal peers.

In this issue of the journal, Tozzi and colleagues [7] address the interesting question of whether the types of surgical specialties influence the specific morbidity of rectosigmoid resection. To date, few publications have addressed this issue. The authors analyzed the surgical outcomes of rectosigmoid resection in a consecutive series of advanced ovarian cancer patients. They compared the results of the procedure performed by the gynecologic oncology team alone (group 1) vs. collaborating with a colorectal team (group 2). Rectosigmoid resection was performed in 162 patients during cytoreductive surgery, 93 cases in group 1 and 69 in group 2. There were no significant differences in most pre-operative characteristics except albumin, hemoglobin, and the frequency of primary surgery between the two groups. Overall morbidity (33% vs. 40%, $p=0.53$), bowel specific morbidity (11.8% vs. 11.5%, $p=0.81$), anastomotic leak rate (4.1% vs. 6.1%, $p=0.43$), the frequency of re-operation (9.6% vs. 6.1%, $p=0.71$) and bowel diversion rate (36.5% vs. 46.3%, $p=0.26$) were comparable in both groups. Longer surgical time in group 2 (341 vs. 416 minutes, $p=0.03$) and the performance of more frequent multiple bowel resections was observed in group 1 (32.2% vs. 14.4%, $p=0.04$). The authors concluded that this study failed to demonstrate any significant difference in the morbidity rate of rectosigmoid resection when performed by gynecologic oncologists versus colorectal surgeons.

Late leader Deng Xiaoping of China in the 1960s said “Black cat or white cat, if it can catch mice, it's a good cat.” Similarly, one may say “Gynecologic oncologist or colorectal surgeon, it does not matter who performs the rectosigmoid resection as long as the outcome is the same.” However, although the morbidity rate associated with rectosigmoid resection does not seem to depend on a colorectal surgeon being involved in the surgery, a gynecologic oncologist should be the one to play the dominant role in the surgical decision making and in defining the extent and aim of the operation. Colorectal surgeons or surgical oncologists are well acquainted with bowel procedures and can be a very helpful asset in challenging cases depending on the expertise and practice patterns of the gynecologic oncologist. However, they are less expert in the biology of ovarian cancer and are unfamiliar with the principles of ovarian cancer treatment since they have not received the equivalent gynecologic oncological training. This may be explained through the higher rate of bowel diversion (36.5% vs. 46.3%) and end colostomy (none vs. 4 patients) observed in group 2 in the study by Tozzi and colleagues [7].

Gynecologic oncologists are well qualified to perform rectosigmoid resections for advanced ovarian cancer if they are well-trained and have adequate exposure to such procedures. Recently, Son et al. [8] showed that a gynecologic oncology surgeon can safely and independently perform rectosigmoid resection and have similar surgical outcomes compared to colorectal surgeons. Nishikimi et al. [9] reported that skilled gynecologic oncology surgeons can safely perform bowel and upper abdominal surgery. The key aspects here are to continuously educate, train, assess and evaluate their surgical skills and outcomes and ensure that they have adequate exposure and infrastructural support. This implies that the gynecologic oncologists who perform those procedures should be confident and adequately trained in managing complications that often arise from such procedures as the present study highlights. This includes a significant rate of anastomotic leak and reoperation. The European Society of Gynaecological Oncology certification for advanced ovarian cancer surgery provides an

excellent example of a formal way to ensure adequate training and performance of complex surgical procedures by gynecologic oncologists [10]. Hands-on training and mentoring programs hosted by the societies and institutions of gynecologic oncology also provide a good opportunity for those who have had little exposure to the procedures [11]. Through these measures, we gynecologic oncologists will be able to develop the requisite skills not only to operate safely and efficiently, but also to maintain our knowledge and to formulate treatment strategies that offer the best prognosis of our patients. The role of close collaborative relationships with other specialties within our own institutions is invaluable as well.

Extensive surgeries, such as those for advanced ovarian cancer debulking, require that all associated surgical, as well as anesthetic specialists, work as a team and provide mutual support for the best interest of the patient. Even if we, as gynecologic oncologists, perform these procedures independently, it is important to have allies in the field of adjacent surgical specialists even just for a second opinion and support in the event of complications or highly complex cases. Adequate infrastructural resources and team work, with the gynecologic oncologists at the steering wheel seems to be the best recipe for optimal outcome of our ovarian cancer patients.

We confidently believe that patients with advanced ovarian cancer have the best prognosis when a well-trained, certified gynecologic oncologist is at the helm of treatment planning. Whether wielding the knife directly is of less relevance as the present study demonstrates. It is hoped that this paper will provide an impetus for strengthening the attention to surgical training and education for gynecologic oncologists worldwide.

REFERENCES

1. Chang SJ, Bristow RE, Ryu HS. Impact of complete cytoreduction leaving no gross residual disease associated with radical cytoreductive surgical procedures on survival in advanced ovarian cancer. *Ann Surg Oncol* 2012;19:4059-67.
[PUBMED](#) | [CROSSREF](#)
2. Chang SJ, Hodeib M, Chang J, Bristow RE. Survival impact of complete cytoreduction to no gross residual disease for advanced-stage ovarian cancer: a meta-analysis. *Gynecol Oncol* 2013;130:493-8.
[PUBMED](#) | [CROSSREF](#)
3. Chang SJ, Bristow RE, Chi DS, Cliby WA. Role of aggressive surgical cytoreduction in advanced ovarian cancer. *J Gynecol Oncol* 2015;26:336-42.
[PUBMED](#) | [CROSSREF](#)
4. Chang SJ, Bristow RE. Evolution of surgical treatment paradigms for advanced-stage ovarian cancer: redefining 'optimal' residual disease. *Gynecol Oncol* 2012;125:483-92.
[PUBMED](#) | [CROSSREF](#)
5. Chang SJ, Bristow RE. Surgical technique of en bloc pelvic resection for advanced ovarian cancer. *J Gynecol Oncol* 2015;26:155.
[PUBMED](#) | [CROSSREF](#)
6. Park SJ, Kim J, Kim SN, Lee EJ, Oh S, Seol A, et al. Practice patterns of surgery for advanced ovarian cancer: analysis from international surveys. *Jpn J Clin Oncol* 2019;49:137-45.
[PUBMED](#) | [CROSSREF](#)
7. Tozzi R, Valenti G, Vinti D, Campanile RG, Majd HS, Cristaldi M, et al. Rectosigmoid resection during visceral-peritoneal debulking (VPD) in patients with stage IIIC-IV ovarian cancer: morbidity of gynecologic oncology vs. colorectal team. *J Gynecol Oncol* 2021;32:e42.
[CROSSREF](#)
8. Son JH, Kim J, Shim J, Kong TW, Paek J, Chang SJ, et al. Comparison of posterior rectal dissection techniques during rectosigmoid colon resection as part of cytoreductive surgery in patients with epithelial ovarian cancer: close rectal dissection versus total mesorectal excision. *Gynecol Oncol* 2019;153:362-7.
[PUBMED](#) | [CROSSREF](#)

9. Nishikimi K, Tate S, Kato K, Matsuoka A, Shozu M. Well-trained gynecologic oncologists can perform bowel resection and upper abdominal surgery safely. *J Gynecol Oncol* 2020;31:e3.
[PUBMED](#) | [CROSSREF](#)
10. Fotopoulou C, Concin N, Planchamp F, Morice P, Vergote I, du Bois A, et al. Quality indicators for advanced ovarian cancer surgery from the European Society of Gynaecological Oncology (ESGO): 2020 update. *Int J Gynecol Cancer* 2020;30:436-40.
[PUBMED](#) | [CROSSREF](#)
11. Tewari KS. Fifth annual workshop of cytoreductive surgery for advanced ovarian cancer and peritoneal surface malignancies. *Gynecol Oncol Res Pract* 2016;3:10.
[CROSSREF](#)