

# Quality indicators in cervical cancer surgery: a valiant step in the right direction

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Received 12 November 2019  
Accepted 12 November 2019

Standard of care, both for clinical and surgical practice, should be based on the principle of high-quality research and consistent patterns in the management of disease. The concept of providing the same or similar management to patients diagnosed with gynecologic cancers has recently surfaced as the core value of patient care in our field. We have witnessed how recent publications in the surgical management of patients with gynecologic cancers have called into question our previously held standards. In a landmark study by Harter et al,<sup>1</sup> the investigators showed that systematic pelvic and para-aortic lymphadenectomy in patients with advanced ovarian cancer who underwent complete macroscopic resection of intra-abdominal disease, was not associated with longer overall or progression-free survival compared with no lymphadenectomy. In another controversial, yet impacting study, van Driel et al<sup>2</sup> published a prospective randomized trial on the addition of hyperthermic intraperitoneal chemotherapy (HIPEC) to interval surgery. The authors found that among patients with stage III epithelial ovarian cancer, the addition of HIPEC to interval surgery resulted in longer recurrence-free survival and overall survival than surgery alone. Lastly, and perhaps one of the most impacting and controversial studies of recent years, the LACC trial, published by Ramirez et al,<sup>3</sup> compared open versus minimally invasive radical hysterectomy in patients with early-cervical cancer. In that study, the authors found that minimally invasive radical hysterectomy was associated with lower rates of disease-free survival and overall survival than open radical hysterectomy. These studies are great examples of how the community of gynecologic oncologists is often hesitant to accept a reversal in 'standard traditional practice' and thus naturally call into question the surgical approaches, particularly focusing on patient selection, standardization of technique, pathology processing and reporting, on external validity, and patterns of practice.

To that end, the lead article for the January issue of the International Journal of Gynecological Cancer,<sup>4</sup> highlights the importance of providing guidance pertaining to optimization and quality improvement in surgical care. In this article published by the European Society of Gynecological Oncology (ESGO), the group

developed quality indicators using a four-step process that included a systematic literature review, in-person meetings of international leading experts in cervical cancer, an internal validation process, and subsequently, an external review by a panel of clinicians in Europe, as well as patient representatives. The ESGO Council and all involved in this project ought to be commended for this valiant effort to establish surgical quality indicators for patients with cervical cancer and for their aim of improving the quality of surgery for patients with this disease.

The article is comprehensive and addresses many of the major points when considering implementation of quality indicators. It also offers readers an opportunity to reflect on these points and consider several important items. The authors advocate patients to be evaluated and treated in high-volume centers that offer the advantage of a comprehensive multidisciplinary team and a structured centralized care. In addition, the authors propose that, in such settings, patients benefit from the high quality of surgery offered by specialized surgeons bearing extensive expertise and skill. Although these are clear and well-established benefits, one needs to interpret such measures of quality with some caution. First, we must recognize that hospital volume does not necessarily equate to greater surgeon proficiency in all settings. Similarly, such generalization would assume that 'all surgeons' in a high-volume hospital are able to provide the highest level of surgical proficiency and skill. Second, one must also note that although high-volume centers are generally associated with improved outcomes when compared with lower-volume settings, the result of such observation may not necessarily and automatically be a direct correlation with 'better surgeon skills' but rather the fact that in such high-volume centers, as a result of a multidisciplinary approach, patient selection for treatment and surgery may be more refined by more sophisticated imaging modalities and radiologic expertise, as well as greater quality of pathology evaluation. Thus, results on oncologic outcomes might be based more on a comprehensive approach to care than solely on surgeon skill and expertise. Similarly, the expectation of centralized care, although a noble one and certainly deserving of consideration, might



► <http://dx.doi.org/10.1136/ijgc-2019-000878>



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**To cite:** Ramirez PT. *Int J Gynecol Cancer* 2020;**30**:1–2.

## Editorial

be somewhat unrealistic, as we know that for the overwhelming majority of patients with cervical cancer, a disease predominant in the underserved population, are not able to travel long distances to specialized centers. Thus precluding the concept that we should aim to direct most patients with this disease to such centers.

On the subject of standardization of practice, the authors address a very important point when focusing on operative reports. They advocate routine documentation of the surgical approach, lymph node staging approach, including details on sentinel lymph node mapping. In addition, they propose routine documentation of the type of radical hysterectomy performed, which is often an issue of contention among gynecologic oncology surgeons. It is also commendable that the authors have emphasized the critical importance of accurate and objective measures of tumor size. However, one should go a step further and advocate for a more standardized method of determining which approach should be routinely used to determine tumor size in cervical cancer patients. Today, there is little agreement among gynecologic oncologists as to whether tumor size should be based on bimanual examination, on MRI imaging, or on a combined assessment based on preoperative pathology and final pathology of surgical specimen. This discrepancy in patterns of practice has hindered our ability to accurately determine the true definition of 'tumor size'. Further efforts should be implemented in order to assure that we as gynecologic oncologists, in conjunction with pathologists and radiologists, are speaking the same language.

Perhaps the greatest barrier in establishing consistent adequate surgical techniques lies in the existing differences in patterns of practice by surgeons and in the challenges in auditing surgeon performance. One may consider that surgeon volume should be a direct marker of surgical expertise and outcomes: however, measurement of surgeon volume is, in of itself already a mathematical challenge. As an example, one may look at two surgeons who over the span of 5 years have performed 500 procedures each. However, the first surgeon was initially very active surgically and then held more administrative positions, which lead to performing 400 cases the first year, and then 100 cases over the span of the next 4 years. The second surgeon may have had a consistent practice and performed an average of 100 cases per year. When considering which surgeon might be more proficient in a particular surgery there might be a difference of opinion. Similarly, considering adequacy of the surgery provided to patients based on 'center volume' rather than 'surgeon volume' may also be flawed with misleading reassurance. A center

may have 15 procedures in 1 year, however, if there are five faculty surgeons performing radical hysterectomy, then this might average three radical hysterectomies per surgeon in 1 year, would we not agree that this is definitely not 'high-volume'? Last, surgeon proficiency and skill is not a criteria that can be objectively and scientifically defined and, as a result, one is left with very subjective criteria as the only measure of this variable. One might also ask who is to decide or who has that 'almighty authority' to define the difference between the 'skilled surgeon' and the 'unskilled surgeon'? In other words, how do we as a community of gynecologic oncologists set the surgical standards concerning surgical techniques, and even beyond this point, what measures do we impose when outcomes and expectations on surgical proficiency are not met?

It is precisely these uncertainties that the authors of this article are trying to address and, by doing so, they are leading our mission as gynecologic oncologists, pathologists, radiation oncologists, and combined caregivers to improve the quality of care for our patients with cervical cancer. We must congratulate and recognize ESGO and all who participated in this massive effort to provide guidance and direction in establishing quality measures of care for women with cervical cancer. This is absolutely a step forward and one that should be replicated for all disease sites in gynecologic oncology.

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**Contributors** PR is the sole author of this article.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial, or not-for-profit sectors.

**Competing interests** None declared.

**Patient consent for publication** Not required.

**Provenance and peer review** Commissioned; internally peer reviewed.

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