Secondary cytoreductive surgery for recurrent endometrial cancer: can we predict the future?

Fionán Donohoe,[1] Mario M Leitao, Jr [1,2]

[1]Gynecology Service, Department of Surgery, Memorial Sloan Kettering Cancer Center, New York, New York, USA
[2]Department of Obstetrics and Gynecology, Weill Cornell Medical College, New York, New York, USA

Correspondence to
Dr Mario M LeitaoJr; leitaom@mskcc.org

Received 16 October 2024
Accepted 21 October 2024

► http://dx.doi.org/10.1136/ijgc-2024-005383

To cite: Donohoe F, Leitao, Jr MM. *Int J Gynecol Cancer* Published Online First: [please include Day Month Year]. doi:10.1136/ijgc-2024-006226

Secondary cytoreductive surgery is commonly considered in the setting of recurrent ovarian cancer. Randomized controlled trials have shown a survival advantage in properly selected patients in whom complete gross resection can be obtained.[1] Secondary cytoreductive surgery is often considered and attempted in patients with recurrent endometrial cancer, but limited data exist, although retrospective series have attempted to provide information to guide decision making in these complex situations.[2–4]

Vargiu and colleagues provided a retrospective analysis and proposed a model to predict patients in whom complete gross resection may be possible.[5] They retrospectively analyzed 331 cases of first recurrent endometrial cancer compiled from three centers, with highly regarded and experienced surgeons. Their model was created using two of their three cohorts: one cohort underwent examination under anesthesia and diagnostic laparoscopy without an attempt at secondary cytoreductive surgery (n=57) and the second cohort underwent examination under anesthesia and diagnostic laparoscopy with an attempt at secondary cytoreductive surgery (n=186). Patients in the third cohort received medical therapy alone. Patients who were younger (<65 years), with a lower body mass index (<30 kg/m^2), better baseline performance status, fewer comorbidities, and a single site of relapse were more likely to undergo an attempt at any surgery. In the two cohorts that underwent examination under anesthesia and diagnostic laparoscopy with or without an attempted secondary cytoreductive surgery, there were significant associations with complete gross resection and age <65 years, single site of disease recurrence, and pattern of recurrence on multivariate analysis. These factors were used to create a predictive model assigning a score of 0 or 1 to each of the factors. The authors reported complete gross resection rates of 33% for a score of 0, 63% for a score of 1, 86% for a score of 2, and 93% for a score of 3.

This is a wonderful and potentially clinically useful model to better predict in which patients complete gross resection is obtainable. All of the investigators were excellent surgeons, however, and therefore it may not be generalizable to surgeons with varying experience and skill levels. In addition, patients who underwent only an examination under anesthesia and diagnostic laparoscopy were included in the model's creation. If complete gross resection was not attempted, the investigators cannot ascertain whether it was possible in these patients. Furthermore, determining the possibility of complete gross resection can be subjective, even if two surgeons are making the decision. A model to predict complete gross resection should only include patients in whom an attempt is made to avoid surgeon subjectivity. Another important consideration is that complete gross resection was possible in a third of patients with a score of 0. We do not entirely agree that all patients with a score of 0 should be triaged directly to medical therapy. The difference in complete gross resection rates between scores of 2 and 3 is likely not significant. The area under the curve for this model was 0.74.

The authors compared single with multiple sites of relapse, but how many 'multiple' sites are too many? The authors also suggest that all cases should begin with diagnostic laparoscopy, regardless of score. This approach is not unreasonable, but we would likely not start with a diagnostic laparoscopy in all patients who have a high chance of complete gross resection, unless we were planning to attempt the entire surgery using a minimally invasive approach.

This study highlights that secondary cytoreductive surgery for endometrial cancer is possible, and high complete gross resection rates are obtainable. We applaud the authors for sharing their analysis and proposed model, which provide a starting point from which to validate and improve our ability to predict complete gross resection. Surgical experience and proficiency remain strong determinants of surgical decision making

and outcomes. A randomized trial seems warranted and may be feasible in this cohort of patients among our international community. We have not yet proven the benefit of complete gross resection for patients with level I evidence.

X Mario M Leitao, Jr @leitaomd

Contributors Both authors contributed to the writing of this manuscript. ML is the guarantor.

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 ML reports personal fees from Medtronic, Intuitive Surgical, and J&J/Ethicon.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Commissioned; internally peer reviewed.

ORCID iD

Mario M Leitao, Jr http://orcid.org/0000-0003-0818-3836

REFERENCES

1 Harter P, Sehouli J, Vergote I, *et al*. Randomized Trial of Cytoreductive Surgery for Relapsed Ovarian Cancer. *N Engl J Med* 2021;385:2123–31.
2 Moukarzel LA, Braxton KF, Zhou QC, *et al*. Non-exenterative surgical management of recurrent endometrial carcinoma. *Gynecol Oncol* 2021;162:268–76.
3 Legge F, Restaino S, Leone L, *et al*. Clinical outcome of recurrent endometrial cancer: analysis of post-relapse survival by pattern of recurrence and secondary treatment. *Int J Gynecol Cancer* 2020;30:193–200.
4 Germanova A, Raspagliesi F, Chiva L, *et al*. Oncological outcome of surgical management in patients with recurrent uterine cancer-a multicenter retrospective cohort study-CEEGOG EX01 Trial. *Int J Gynecol Cancer* 2019;29:711–20.
5 Vargiu V, Rosati A, Tortorella L, *et al*. Optimizing patient selection for secondary cytoreductive surgery in recurrent endometrial cancer. *Int J Gynecol Cancer* 2024.:ijgc-2024-005383.