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The authors report no conflict of interest.

REFERENCES

1. Matsuo K, Chen L, Mandelbaum RS, Melamed A, Roman LD, Wright JD. Trachelectomy for reproductive-aged women with early-stage cervical cancer: minimally-invasive surgery versus laparotomy. *Am J Obstet Gynecol* 2019;220:469.e1-469.e13.
2. Ju UC, Kang WD, Kim SM. Is the ovarian preservation safe in young women with stages IB–IIA villoglandular adenocarcinoma of the uterine cervix? *J Gynecol Oncol* 2018;218;29:e54.
3. Park J-Y, Nam J-H. How should gynecologic oncologists react to the unexpected results of LACC trial? *J Gynecol Oncol* 2018;29:e74.
4. Thome S, Simmons RL, Tsung A. Surgery for cancer: a trigger for metastases. *Cancer Res* 2017;77:1548–52.

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REPLY



We appreciate the comments and insights by Dietl et al regarding our recent study.¹ The authors expressed their concern regarding uterine manipulator use during minimally invasive radical hysterectomy for early-stage cervical cancer as a risk factor for tumor spillage and dissemination. Several previous studies may support their hypothesis. First, uterine manipulator use during minimally invasive radical hysterectomy for early-stage cervical cancer was associated with increased risk of tumor surface disruption (45% vs 13%) and artificial parametrial tumor carryover (65% vs 29%) compared with laparotomy (both, $P < .05$).² Second, albeit statistically not significant, there is a trend towards an increased risk of recurrence with the use of a uterine or vaginal manipulator during minimally invasive radical hysterectomy for early-stage cervical cancer: 0% for no manipulator use vs 7–11% for vaginal or uterine manipulator use ($P = .119$).³

Although interpretation is limited by the small sample size and methodologic limitations of the data, these studies suggest that direct contact against the tumor in uterine cervix may be associated with iatrogenic tumor spread with manipulation. To avoid such an event, some surgeons advocate a specific surgical technique by concealing the tumor with vaginal cuff closure at the beginning of surgery, followed

by a placement of a uterine corpus-holding device inserted through the posterior vaginal fornix.⁴ Although this “no-look no-touch technique” may reduce tumor disruption, whether the technique mitigates the risk associated with minimally invasive hysterectomy remains unknown.

Although our findings that compare minimally invasive and open trachelectomy appear reassuring, overall mortality rates were low, significantly limiting the power of our study to detect differences in survival between the groups. Furthermore, we were unable to assess manipulator use or disease recurrence.¹ Further study of the mechanisms underlying the increased risk of death that is associated with minimally invasive radical hysterectomy and techniques to mitigate that risk are ongoing; the use of minimally invasive techniques in the treatment of cervical cancer should be approached with caution. ■

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REFERENCES

1. Matsuo K, Chen L, Mandelbaum RS, Melamed A, Roman LD, Wright JD. Trachelectomy for reproductive-aged women with early-stage cervical cancer: minimally invasive surgery versus laparotomy. *Am J Obstet Gynecol* 2019;220:469.e1–13.
2. Rakowski JA, Tran TA, Ahmad S, et al. Does a uterine manipulator affect cervical cancer pathology or identification of lymphovascular space involvement? *Gynecol Oncol* 2012;127:98–101.
3. Uppal S, Gehrig P, Vetter MH, et al. Recurrence rates in cervical cancer patients treated with abdominal versus minimally invasive radical hysterectomy: a multiinstitutional analysis of 700 cases. Paper presented at: 2019 Annual Meeting of American Society of Clinical Oncology, Chicago, IL, May 31–June 4, 2019.
4. Kanao H, Matsuo K, Aoki Y, et al. Feasibility and outcome of total laparoscopic radical hysterectomy with no-look no-touch technique for FIGO IB1 cervical cancer. *J Gynecol Oncol* 2019;30:e71.

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