Poster #1 | Incidence of tumor spill during minimally invasive hysterectomy for early-stage, low-grade endometrial cancer

Varun U. Khetan, MD, University of Southern California

Topic: Endometrial

Objectives
Association of intraoperative tumor spill and adverse oncologic outcome has been reported in various gynecologic and non-gynecologic malignancies. To date, this association has not been examined in endometrial cancer surgery. The objective of this study was to examine the incidence of tumor spill during minimally invasive hysterectomy for early-stage, low-grade endometrial cancer.

Methods
This is a retrospective observational study examining consecutive patients with stage I, grade 1-2 endometrioid endometrial cancer who underwent minimally invasive hysterectomy (laparoscopic, laparoscopic-assisted vaginal, or robotic-assisted laparoscopic) from 1/2014-12/2020. Three outcome measures were assessed from operative reports: (i) fallopian tubal ligation or ablation, (ii) use of intra-uterine manipulator (IUM) and experience of uterine perforation with the manipulator, and (iii) tumor spill at the time of colpotomy. Descriptive statistics for the outcome measures was performed.

Results
A total of 186 patients met inclusion criteria. The median age and body mass index were 55 and 33, respectively. The majority of tumors were stage IA (85.8%) and grade 1 endometrioid histology (88.1%). Fallopian tubal ligation / ablation was reported in 8.5%. IUM was used in 71.5%. Uterine perforation occurred in 1.5% among the IUM cases and 0% in the non-IUM cases (P=0.413). Tumor spill at colpotomy occurred 2.3% and 2.3% in the IUM and non-IUM groups, respectively (P=0.995).

Conclusions
This study suggests that tumor spill can occur at minimally invasive hysterectomy for early-stage, low-grade endometrial cancer. Further study is warranted to validate the result of this study and to examine the association for oncologic outcome.