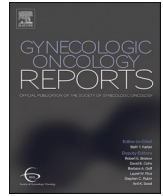


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Surgical film

Robotic radical trachelectomy with an abdominally placed vaginal cerclage for containment of early stage cervical cancer[☆]

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1. Abstract

A 32-year-old gravida 0 presented with stage IB1 squamous cell carcinoma of the cervix. Pelvic examination demonstrated a 1.5 cm endocervical tumor prolapsing through the cervical os. Pelvic MRI demonstrated a tumor size of 1.5 cm, where the upper margin of the lesion was >2 cm from the uterine isthmus. PET/CT was without evidence of metastatic disease. An extensive discussion regarding the LACC trial results and the increased recurrence and death risk associated with a MIS approach were explained to the patient as well as the trial's shortcomings in her low risk group. She understood that the trial was done for patients who underwent a radical hysterectomy as opposed to radical trachelectomy. Furthermore, we discussed that approximately 42% of the patients in each group in the study had a tumor size of 2 cm or greater. She also understood that the majority of the patients were operated on outside of the United States and with conventional laparoscopy and not with robotics (i.e. in the MIS group 84.4% underwent laparoscopy and 15.6% underwent robot-assisted surgery) (Ramirez et al., 2018). Acknowledging this, the patient strongly desired minimally invasive surgery with a robotic approach, since she was very worried about the prolonged recovery that would otherwise be associated with the open approach.

No intrauterine manipulator was placed. ICG dye was injected into the cervix for delineation of pelvic sentinel lymph nodes which were negative on frozen section. Bilateral uterine arteries were sacrificed. Bilateral uterosacral ligaments were transected 2 cm from their vaginal insertions. 2–0 prolene suture was utilized to place a purse-string suture via a robotic-approach 2 cm below the cervicovaginal junction. The colpotomy was performed circumferentially at approximately 1 cm below the suture to avoid any tumoral contamination of the peritoneal cavity. The cervix was amputated 1 cm below the uterine isthmus. The specimen was placed in a laparoscopic bag and removed through the vagina. The resection margins were deemed negative with intra-

operative pathology. The upper vagina was reconstructed to the lower uterine segment.

Our hypothesis for increased recurrence and death risk associated with MIS approach is the use of uterine manipulator and seeding of the vaginal cuff and peritoneum with the cervical tumor. Our proposed approach is aimed to minimize this risk. Further studies are necessary to better understand the effectiveness of these surgical modifications in MIS techniques.

Author contributions

Dr. Menderes conceived of the presented ideas. Drs. Tymon-Rosario, Khadraoui and Nagarkatti abstracted the data from the medical records and wrote the manuscript in consultation with Dr. Menderes. Dr. Menderes provided images and the video. Dr. Tymon-Rosario narrated the video. Input from all of the authors was used for the final editions to the manuscript.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary material

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.gore.2020.100673>.

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[☆] The project was deemed exempt from IRB approval.

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