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Case Report

Robotically Assisted Laterally Extended Endopelvic Resection (LEER) of an Isolated Ovarian Cancer Recurrence

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ABSTRACT

A 64-year-old woman with recurrent ovarian cancer isolated to the left pelvic sidewall underwent robotic resection of a tumor adherent to the external iliac vein and encasing the ureter and internal iliac vessels. A narrated video-clip of the case is included.

Introduction

Most women with ovarian cancer present with stage 3C, high grade serous disease. Although the majority will initially respond well to a combination of cytoreductive surgery and chemotherapy, most will ultimately develop disseminated and resistant recurrence in the peritoneal cavity and succumb. A small percent of women will develop isolated and resectable recurrence and benefit from a second surgery, particularly if there has been a long progression-free interval (greater than 1 year since completion of chemotherapy) [1, 2]. Here we present the surgical details of such a case.

Case Presentation

A 64-year-old with stage 3C, high grade serous ovarian cancer completed primary treatment (surgery + chemotherapy) in January of 2014. In September of 2018 she developed serologic and radiologic evidence of recurrence isolated to the left pelvic sidewall. Her BMI was 35. On 3/18/19 this patient underwent robotic resection of a tumor adherent to external iliac vein and encasing the ureter and internal iliac vessels. The multidisciplinary team included colorectal surgery, gynaecologic oncology and urology. Total surgery time was 200 minutes and EBL was 100cc. An edited and narrated video is included. Recovery was uneventful except for transient buttocks pain and a small vesicovaginal fistula. Pathology showed a high-grade adenocarcinoma involving the distal ureter and portion of the vagina (7x6x3.5cm), invading skeletal muscle and fibro-adipose tissue. Further systemic treatment was held, and the patient recurred in the peritoneal cavity at 6 months.

Discussion

With the da Vinci robotic platform becoming increasingly available over the past 10-15 years, minimally invasive approaches to oncologic resection have been utilized and developed to a greater extent. Advantages to the patient are quicker and easier recovery with less

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impact as a potential next phase of treatment is planned. Sophisticated resections can be performed that mimic (and in some cases perhaps surpass) what might be performed by open surgery. Any novel approach requires close scrutiny. For oncologic resection this specifically applies to oncologic outcomes as well as perioperative morbidity. With relatively uncommon cases, as in the present report, this is difficult and underlines the importance of such a report. Laterally extended endopelvic resection (LEER) has a limited role in the surgical management of gynaecologic and other pelvic malignancies [3, 4]. The present case demonstrates the technologic feasibility of performing this procedure utilizing robotically assisted surgery in a highly selected patient. The short progression-free interval indicates lack of benefit. Whether this approach is applicable to a population of patients would require additional cases with follow-up (Link).

REFERENCES

1. Dennis S Chi, Kristina McCaughty, John P Diaz, Jae Huh, Sarah Schwabenbauer et al. (2006) Guidelines and selection criteria for secondary cytoreductive surgery in patients with recurrent, platinum-sensitive epithelial ovarian carcinoma. *Cancer* 106: 1933-1939. [Crossref]
2. Renee A Cowan, Ane Gerda Zahl Eriksson, Sara M Jaber, Qin Zhou, Alexia Iasonos et al. (2017) A comparative analysis of prediction models for complete gross resection in secondary cytoreductive surgery for ovarian cancer. *Gynecol Oncol* 145: 230-235. [Crossref]
3. Michael Höckel, Lars-Christian Horn, Jens Einenkel (2012) (Laterally) extended endopelvic resection: surgical treatment of locally advanced and recurrent cancer of the uterine cervix and vagina based on ontogenetic anatomy. *Gynecol Oncol* 127: 297-302. [Crossref]
4. Giuseppe Vizzielli, Raj Naik, Lukas Dostalek, Nicolò Bizzarri, Ali Kucukmetin et al. (2019) Laterally Extended Pelvic Resection for Gynaecological Malignancies: A Multicentric Experience with Out-of-the-Box Surgery. *Ann Surg Onc* 26: 523-530. [Crossref]