Pelvic exenteration for gynecologic malignancies

Postoperative complications and oncologic outcomes

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The objective of this study was to evaluate complications, morbidity, and oncologic outcomes of pelvic exenteration (PE) as treatment for gynecologic malignancies.

Methods: After obtaining the approval of the local research ethics committee, we reviewed and evaluated all medical records of patients who underwent PE for recurrent or persistent gynecologic cancer after primary treatment between February 2008 and December 2018 at our department.

OS was defined as time from exenteration to date of death or last contact. Complications were graded according to the Clavien-Dindo Classification.

Results: Twenty-five patients underwent pelvic exenteration for persistent or recurrent gynecologic cancers. Median age was 51 years. The majority of patients presented with cervical cancer. Vaginal, uterine and vulvar cancer represented the remaining cases. All patients had received prior treatment: previous radiotherapy (92%), and/or surgery. Sixteen patients underwent anterior pelvic exenteration (64%), eight patients total exenteration (32%) and one posterior pelvic exenteration (Table 1).

Detailed data on surgical outcomes are shown in Table 2.

The most common type of urinary reconstruction was ileal conduits (88%).

Nearly every patient in this series experienced a complication after pelvic exenteration. The overall rate of complications was 92% (22/25), 52% were grade III/IV. (Table 3).

Median time from primary treatment to exenteration was 15 months(10-30). Median follow up time was 29 months (12–41).

At the time of analysis, 9 patients had recurred (36%). Median free time from the date of exenteration to date of relapse or death was 7 months (4-27). Two-year recurrence-free survival was 71%.

Conclusion: Pelvic exenteration has a high rate of complications and morbidity, but can be the last curative opportunity in patients with recurrent or persistent gynecologic malignancies.

This procedure should be performed by multidisciplinary, experienced teams in a tertiary medical center.

Ileal conduit (a) and neovagina (b).

Total infralevator pelvic exenteration (c)

Table 1- Demographics

	n	(%)
Number of patients	25	
Mean age (range), yr	51.04	28 to 69
BMI	24.6	17 to 35
Primary Tumor location		
Cervix	18	72%
Vagina	4	16%
Vulva	1	4%
Uterus	2	8%
Primary Treatment		
Radiotherapy	13	52%
Surgery + chemo radiotherapy	10	40%
Surgery only	2	8%
Type of exenteration		
Total	8	32%
Anterior	16	64%
Posterior	1	4%

Table 2 - Surgical outcomes

	n (%)
Mean operating time (min)	279 (223-390)
Blood transfusion	19 (78)
Mean stay ICU (days)	3.2
Mean total hospital stay (days)	9.3
Surgical site infection	7 (28)
Need for reoperation	4 (16)
Perioperative mortality	0

Reconstruction type

	n
Ileal conduits	22
Ureterostomy	1
Orthotopic neobladder	2
Permanent colostomy	6
leostomy	3

Clavien-Dindo	Complication	n, (%)
I	Fever	16 (64)
II	Wound infection	5(20)
	Renal failure	3(12)
IIIA	Ureteral complication	1(4)
	Urinary diversion complication	3(12)
	Bowel obstruction	2(8)
IIIB	Fistula	6(24)
IV	Thromboembolic event	1(4)