

VOIDING FUNCTION IN WOMEN WITH ORTHOTOPIC NEOBLADDER DIVERSION

Hypothesis / aims of study

Voiding function following cystectomy and orthotopic neobladder in female patients remains a topic of substantial interest with few large series available for analysis. Herein we describe our experience with postoperative voiding issues in female neobladder patients.

Study design, materials and methods

A retrospective review from 1995 to 2008 was performed to evaluate voiding function, surgical technique, and diversion related complications in female patients with ileal neobladder urinary diversions.

Results

Forty-one female patients underwent cystectomy and orthotopic diversion with sufficient follow up for inclusion. Thirty-eight (92.7%) patients had anterior vaginal wall sparing. Without vaginal sparing, all patients had some degree of incontinence or retention. Excluding patients with neobladder-vaginal fistulas, 6 patients reported diurnal incontinence (15.8%), 6 indicated daytime only incontinence (15.8%), and 10 acknowledged nighttime only incontinence (26.3%). Overall complete continence in patients with vaginal sparing was 42%. Two patients with preoperative stress incontinence both had significant post-diversion symptoms. Average number of pads per day was 3.7 for those with diurnal incontinence, 2.8 for daytime only, and 0.7 for nighttime only. These differences were significant for diurnal versus nighttime ($p = 0.002$) and daytime versus nighttime ($p = 0.027$). Eight patients (19%) reported urinary infections associated with fever or local symptoms. Twenty-nine women (76%) were able to adequately empty with a mean postvoid residual (PVR) of 32 cc. Twelve patients had urinary retention with a mean PVR of 326 cc ($p = 0.0008$) necessitating self catheterization. Neobladder-vaginal fistulas were diagnosed in 3 patients (7.3%). Nine women required further surgical interventions related to their urinary diversion including six patients who underwent injection of urethral bulking agents (14.6%).

Interpretation of results

In this single institution series, the majority of women with orthotopic neobladder diversion did not experience urinary retention, although less than half reported complete continence. All of the patients who did not have vaginal sparing had postoperative voiding dysfunction although the contribution of a wider resection to these results is uncertain.

Concluding message

We present our experience with orthotopic urinary diversion in a series of female patients undergoing cystectomy. These data reinforce the necessity of preoperative voiding function evaluation and counseling to insure that patient expectations match expected outcomes.

<i>Specify source of funding or grant</i>	None
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	IRB
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes