



Functional Outcomes of T-pouch Orthotopic Substitution Cystoplasty: 14-year experience

Introduction

- To retrospectively review the functional outcomes of Tuen Mun Hospital's experience of T-pouch orthotopic substitution cystoplasty and to identify the adverse risk factors

Patient and Method

- Patients who has underwent radical cystectomy with T-pouch orthotopic substitution cystoplasty for urinary bladder malignancy from Jan 2006 to Dec 2020 in Tuen Mun Hospital were included.
- Their continence (daytime / nighttime) and clean intermittent catheterization (CIC) status were analyzed.
- Fisher Exact test was used to determine the association between age, sex, preoperative comorbidities of patients and functional outcomes.

Result

- 42 patients included; 39 Male, 3 Female
- Mean Age (range) 61 (31-77); Median FU 65 (4-187)
- 35 (83.3%) Smoker
- Comorbidities:
 - HT 15 (35.7%) ; DM 8 (19%) ; History of IHD 2 (4.6%) ; History of CVA 4 (9.5%)
- Functional Outcome

CIC Status	No. of Patient (%)	Mean CIC Daily Frequency (range)
Self Void Alone	13 (31%)	0
CIC + Self Void	18 (42.9%)	3 (1-6)
CIC Alone	11(26.2%)	5.7 (4-8)

Continence (0 pad/ day)	No. of Patient (%)
Daytime	37 (88.1%)
Nighttime	30 (71.4%)

- Correlation of Adverse Risk Factors to Functional Outcome (Fisher Exact test)

	CIC Alone	Able to Self Void	Odd Ratio (p value)
Age \geq 65	0	15	0 (1.00)
Age <65	11	16	
Male	9	30	0.15 (0.163)
Female	2	1	
Smoker	10	25	2.4 (0.654)
Non-smoker	1	6	
DM	5	3	7.78 (0.02)
Non-DM	6	28	
HT	4	11	1.039 (1.00)
Non-HT	7	20-	
Hx of IHD	1	1	3.0 (0.460)
No Hx of IHD	10	30	
Hx of CVA	0	4	0 (0.558)
No Hx of CVA	11	27	

	Incontinent (\geq 1pad/ day)	Continent	Odd Ratio (p value)
Age \geq 65	7	7	4.6 (0.067)
Age <65	5	23	
Male	11	28	0.78 (1.00)
Female	1	2	
Smoker	8	27	0.22 (0.09)
Non-smoker	4	3	
DM	4	4	3.25 (0.195)
Non-DM	8	26	
HT	4	11	0.45 (1.00)
Non-HT	8	10	
Hx of IHD	1	1	2.6 (0.49)
No Hx of IHD	11	29	
Hx of CVA	1	3	0.82 (1.00)
No Hx of CVA	11	27	

Conclusion

- Our experience of T-pouch orthotopic substitution cystoplasty post radical cystectomy demonstrated satisfactory voiding function
- DM were significantly associated with CIC dependence

