

ABSTRACT ID# 18-6432: Incidence of Peyronie's Disease After Robot-Assisted Radical Prostatectomy in Men with Post-Operative Suprapubic Catheters and no Urethral Foley Catheters

BACKGROUND

Radical prostatectomy has been associated with an increased incidence of Peyronie's disease (PD). It has been hypothesized that the use of an indwelling foley catheter in the post-operative period may increase the incidence of PD.

STUDY OBJECTIVES

- The reported rate of PD following radical prostatectomy is estimated to be near 15%.
- Our objective was to estimate the incidence of PD after robot-assisted radical prostatectomy (RARP) in a cohort of prostate cancer men who had a suprapubic tube (SPT) rather than a foley catheter in the immediate postoperative period.

STUDY METHODS

- We analyzed our institutional database for men who underwent RARP from January 2008 to February 2016. Men who had an SPT and no foley for bladder drainage in the immediate post-operative period and who were covered by our institution's subsidiary health insurance provider were included.
- Incidence of PD was defined as confirmed diagnosis, or if a patient received medical or surgical treatment for PD. Descriptive statistics were performed and reported.

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RESULTS

TABLE 1: Population Characteristics

	n (%)	Mean ± SD	Range
Age (years)	381 (100)	59.5±7.3	39-81
Race	381 (100)		
White	215 (56.3)		
Black	148 (38.7)		
Other/Missing	18 (4.7)		
BMI	381 (100)	28.6±4.2	18.5-47.1
Cardiovascular Comorbidities	381 (100)		
Hypertension	205 (53.8)		
Diabetes Mellitus	53 (13.9)		
Hyperlipidemia	135 (35.4)		
Ischemic Heart Disease	8 (2.0)		
Peripheral Vascular Disease	6 (1.5)		
Charlson Comorbidity Index	381 (100)		
0	225 (59.0)		
1	102 (26.8)		
2+	54 (14.2)		
Pre-Operative SHIM	381 (100)	17.5±8.3	0-25
Post-Operative SHIM			
1-year	114 (29.9)	10.8	
2-year	82 (21.5)	12.0	
Operative Nerve Sparing	381 (100)		
Standard	157 (41.2)		
Unilateral Veil	60 (15.8)		
Bilateral Veil	116 (30.4)		
Unilateral Wide	33 (8.7)		
Bilateral Wide	15 (3.9)		
SPT Catheter Time (days)	381 (100)	8.3±5.7	1-100
Follow-up (months)	381 (100)	43±23	1-96

TABLE 2: Characteristics of Patients with PD

		n (%)	Mean ± SD	Range
Age (years)		7 (100)	47.43±5.6	49-63
Race		7 (100)		
White		4 (57.1)		
Black		3 (42.9)		
Other/Missing	g	0		
BMI		7 (100)	27.52±3.8	24.13-35
Cardiovascular	Comorbidities	7 (100)		
Hypertension		2 (28.6)		
Diabetes Mel	litus	0		
Hyperlipidem	ia	1 (14.3)		
Ischemic Hear	rt Disease	0		
Peripheral Va	scular Disease	0		
Charlson Como	rbidity Index	7 (100)		
0		0		
1		0		
2+		7 (100)		
Pre-Operative SHIM		7 (100)	18.0±3.6	13-20
Post-Operative	SHIM			
1-year		6 (85.7)	14±8.8	1-24
2-year		4 (57.1)	16±9.6	5-24
Operative Nerve Sparing		7 (100)		
Standard		6 (85.7)		
Unilateral Vei	l	1 (14.3)		
Bilateral Veil		0		
Unilateral Wie	de	0		
Bilateral Wide	2	0		
SPT Catheter Time (days)		7 (100)	7±0.8	6-8
Post-Operative ICI Use		5 (71.4)		
Duration of ICI therapy (months)			54.0±25.3	28-85
Follow-up (mor	nths)	7(100)	58.7±21.8	29-85





- Between January 2008 and February 2016, there were 3,820 RARPs performed at our institution. Of these, 381 met our inclusion criteria.
- Among these men, there were 7 reported cases of new PD, for an incidence of 7/381, or 1.84%.

CONCLUSIONS

- Men in our cohort who underwent RARP and had an SPT in the immediate post-operative period had a lower incidence of PD than described in the published literature of men who received a foley catheter post-operatively.
- Prospective studies will be beneficial to further investigate this relationship.