Maximization of Membranous Urethral Length During Robot-Assisted Radical Prostatectomy Increases Climacturia Recovery (#145)

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Disclosures

I have no conflict of interests to disclose.



Background

- Climacturia occurs in 20-48% of men undergoing robot-assisted radical prostatectomy (RARP) and can be an issue for both patients and their partners.
- In a recent survey via the Endourologic Society:
 - > 63% of prostatectomists believe that climacturia is under-addressed
 - > 54% of prostatectomists believe that climacturia can be a problem



Aim of the study

- Surgical preservation of membranous urethral length (MUL) has been proposed to improve recovery of early and long-term pad-free continence, but its effect on climacturia is not fully explored.
- The present study seeks to determine whether MUL maximization improves long term climacturia recovery.



Methods

Figure 1: Patient Population

Jan 2010-Sep 2018 880 RARP

> Survey sent to 800 (1 year post-RARP)

*HT/RTx: based on their status prior to Tx

339/800 responded (42%)



Surgical Technique Change

Old Technique

The dorsal venous complex (DVC) was stapled prior to transection of the membranous urethra.

127/339 (37%)



New Technique

The DVC is transected without ligation, facilitating prostatic retraction/ rotation, and is then suture ligated.

212/339 (63%)



Results

Table 1:
Demographic
Information
Stratified by Those
Reporting
Climacturia

						•
		Old Technique (N= 127)		New Technique (N= 212)		
	Climacturia status	50 (39%)		77 (36%)		
		Mean	SD	Mean	SD	p-value
	Age	61.3	6.0	61.9	7.4	0.604
	BMI	26.2	2.9	27.4	3.7	0.054
	Pre-op PSA	6.5	4.9	7.5	4.5	0.269
	Pre-op AUA	7.3	5.0	9.6	7.7	0.045
	Bother	1.3	1.2	1.8	1.5	0.050
	Pre-op IIEF-5	21.5	4.3	19.3	6.9	0.028
	Total Testosterone	402.2	187.2	375.5	166.5	0.409
	Free Testosterone	6.9	5.6	6.0	2.4	0.232
	Prostate weight	54.1	18.4	55.2	25.1	0.780
		N	%	N	%	p-value
	Bilateral NS	49	98%	75	97%	1.000
	Pathologic Stage					0.014
	pT2	43	86%	51	66%	
	pT3/pT4	7	14%	26	34%	
	Gleason Grade Group					0.068
	1	7	15%	14	18%	
	2	27	57%	26	34%	
	3	11	23%	25	33%	
	4	0	0%	6	8%	
	5	2	4%	7	6%	
	SV involvement	0	0%	5	4%	0.156



Results

Table 2: Linear Regression of Factors Predicting Climacturia Recovery

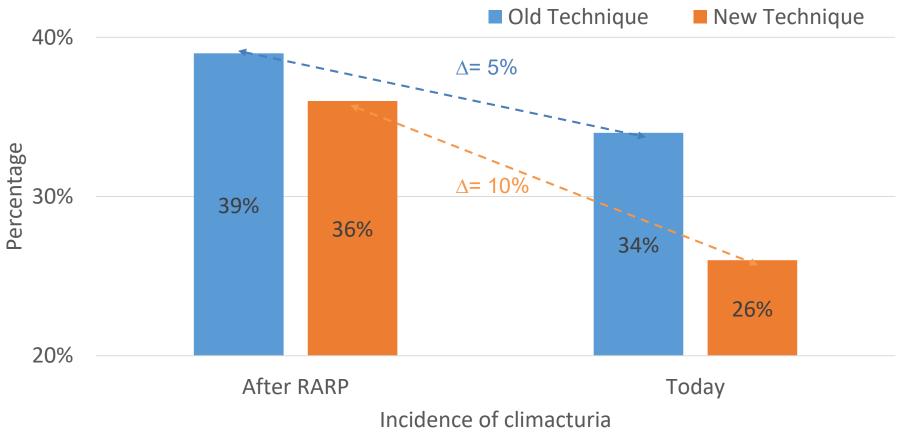
			95% CI				
	В	S.E.	Wald	Sig.	Exp(B)	Lower	Upper
Technique change (0 [ref.] vs 1)	1.110	.511	4.731	.030	3.036	1.116	8.257
Pre-op AUA score (cont.)	.043	.032	1.743	.187	1.044	.979	1.112
Pre-op IIEF-5 (cont.)	.073	.044	2.729	.099	1.076	.986	1.173
Pathologic Stage (cat.)	859	.566	2.305	.129	.424	.140	1.284
BMI (cont.)	009	.065	.021	.886	.991	.873	1.124

On multivariate analysis, patients who had MUL maximization were 3 times more likely to recover from climacturia.



Results

Figure 2: Incidence of Climacturia Recovery Pre- and Post- Technique Change





Conclusions

- Maximizing the MUL tripled the rate of long-term climacturia recovery.
- Surgeons are encouraged to maximize the MUL during RARP as it can improve climacturia recovery.

