Penile Length Shortening Following Robot-Assisted Radical Prostatectomy: Impacts on Erections, Orgasms and Quality of Life (#156)

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I have no conflict of interests to disclose.





- Penile length shortening (PLS) is an underreported phenomenon following radical prostatectomy (RP).
- In a recent survey via the Endourologic Society:
  - ➢ 66% of prostatectomists believe that PLS is under-addressed
  - ➢ 46% of prostatectomists believe that PLS can be a problem



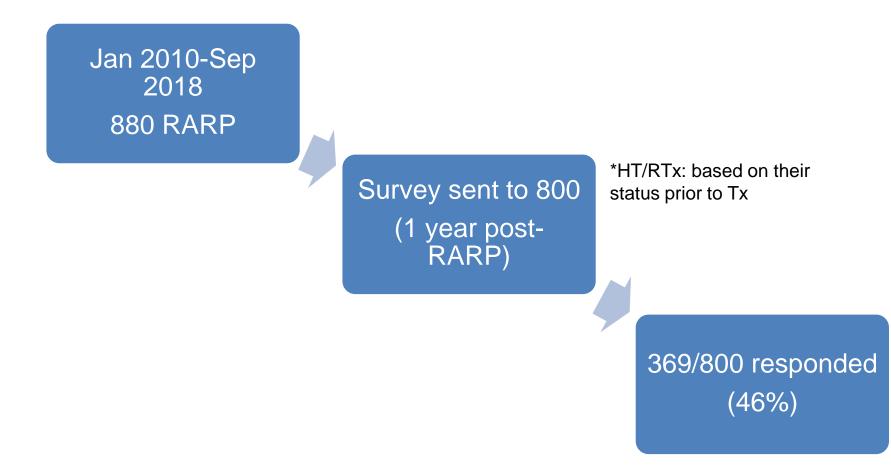
# Aims of the study

- The present study seeks to determine:
- The risk factors of post-RP PLS
- The effects of PLS on erectile function and sexual bother



## Methods

Figure 1: Patient Population





## **Methods**

- Penile length shortening was assessed as following:
- > Do you feel that you have a shorter penis after radical prostatectomy?
- If you were to spend the rest of your life with orgasms the way they are now, how would you feel? (0: delighted to 6: terrible – similar to AUA bother score)
- Answers were treated as a dichotomous variable and correlated with patient demographics using Student T-tests and the Fisher exact test.

# Results

Table 1: Clinical and oncological demographics, stratified by patient report of PLS

		No PLS		Yes PLS		
		153 (41%)		216 (59%)		
		Mean	SD	Mean	SD	p-value
<b>→</b>	Age (years)	62.2	7.7	62.5	7	0.730
	Preoperative PSA	7.9	8.3	7.9	6.9	0.998
	Preoperative AUA	8.7	6.9	8.3	7.2	0.644
	Bother	1.6	1.3	1.6	1.4	0.810
	Preoperative IIEF-5	20.3	6.1	19.4	6.7	0.185
→	Body Mass Index	26.2	3.1	27.6	3.8	<0.001
→	Prostate weight (g)	50.9	16.7	56.2	24.6	0.017
	Preop Total Testosterone	379.5	171.4	367.2	186.2	0.540
	Preop SHBG	47	21	45.1	21	0.435
	Preop Free Testosterone	6.3	3.6	6.3	4.4	0.955
		N	%	Ν	%	p-value
→	Nerve-sparing	136	89.5%	18	8.3%	0.136
	Gleason Grade Group					0.120
	GGG1	35	23.0%	37	17.1%	
	GGG2	53	34.9%	69	31.9%	
	GGG3	37	24.3%	52	24.1%	
	GGG4	11	7.2%	11	5.1%	
	GGG5	6	3.9%	23	10.6%	
→	Pathologic Stage					0.003
	pT2	111	73.0%	123	56.9%	
	pT3/pT4	32	21.1%	73	33.8%	



Table 2: Multivariable analysis of factors contributing to penile shortening

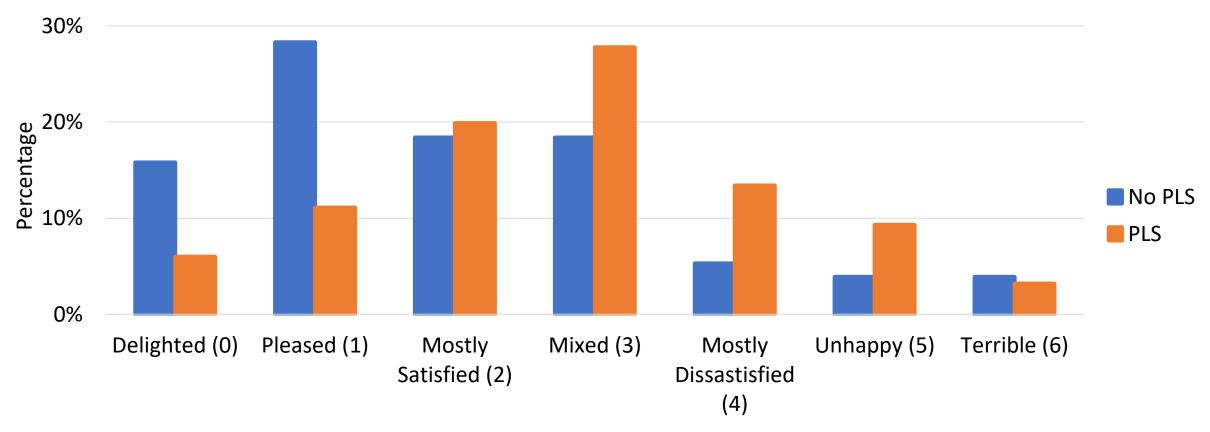
-							95% CI	
		В	S.E.	Wald	Sig.	OR	Lower	Upper
	Age, cont.	-0.016	0.017	0.851	0.356	0.984	0.952	1.018
	Body mass index, cont.	0.1	0.035	8.179	0.004	1.105	1.032	1.184
	Prostate weight, cont.	0.015	0.006	5.769	0.016	1.015	1.003	1.028
	P-stage (pT2 [ref] v. pT3/T4)	0.818	0.284	8.283	0.004	2.265	1.298	3.953
	Nerve-sparing (None [ref] v. any)	-0.137	0.509	0.073	0.787	0.872	0.321	2.363
	Constant	-2.322	1.562	2.21	0.137	0.098		

#### ✤ PLS is predicated by:

- Higher BMI
- Higher prostate weight
- pT3/T4 disease



#### Figure 2: Quality of life with orgasm stratified by PLS



- Men with PLS are significantly more likely to report dissatisfaction in quality of orgasm (bother>3, 25.9% vs. 13.2%, p<0.001).</li>
- This is also observed among their partners (bother>3, 24.1% vs 13.8%, **p=0.001**).

# Conclusions

- The majority of patients experience PLS following RARP (59%) a phenomenon which significantly correlates with orgasm, and quality of life for both the patient and his partner.
- Further efforts to identify risk factors of PLS are encouraged.

