

Outcomes of Readjustable Male Sling (REMEEX System) for Post Prostatectomy Urinary Incontinence: Experience from Two Centers

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INTRODUCTION AND OBJECTIVES: The aim of this study was to evaluate and compare the experience of the readjustable male sling (RMS) in men with post-prostatectomy urinary incontinence from two unrelated centers .

METHODS: From Jan 2007 to Jan 2013, a total of 61 men with urinary incontinence following radical prostatectomy were treated with RMS in two centers (Table 1). The patients underwent urodynamics before RMS implantation and the surgical outcome was assessed by the number of pads used per day. Success was defined as using 1 or less pad/day and using 2 or more pads/day was considered a failure. Conversion to other surgery such as artificial urinary sphincter(AUS) implantation was also defined as failure.

RESULTS: Median age at operation was 69 years (range 52-83) and mean follow up duration was 37.6 months(range 9-80). The sling system was successful in 40 (C1:18/26, C2:22/36) of 61 patients(65.6%). The success rate between the two centers was not significantly different. Twelve (19.7%) presented with unsatisfactory persistent incontinence requiring secondary AUS implantation. Sling system was removed in 2 cases (C2) because of infection with one patient also being unsatisfied with the continence outcome before the removal. Mean age at operation and preoperative pad use were significantly lower in the success group (Table 2). Patients who underwent radiation therapy were more prevalent in the failure group, (7 of 21; 33.3%) than the success group (3 of 40; 7.5%). There was no difference in success depending on the presence of involuntary detrusor contraction (IDC).

CONCLUSIONS: Readjustable male sling using the REMEEX system showed similar success rates in two unrelated centers. The preoperative severity of incontinence seems to be the major predictive factor for success and the slightly lower success rate of C2 compared to C1 correlated with its slightly higher preoperative pad use. Readjustable male sling is a good treatment option for men with mild (less than 3 pads a day) stress urinary incontinence following radical prostatectomy.

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Table 1. Comparisons of preoperative factors and outcomes between two centers

	Total (n=61)	C1 (N=25)	C2 (N=36)	p value
Age	67.53±6.86	66.71±8.16	68.08±5.89	0.451
Cause of incontinence (%)				
Robot prostatectomy	42 (68.9%)	20 (80.0%)	22 (61.1%)	0.117
Open Prostatectomy	19 (31.1%)	5 (20.0%)	14 (38.9%)	
Preop pad uses	3.46±2.15	3.08±1.58	3.72±2.46	0.219
Preop radiation (%)	10 (16.4%)	4 (16.0%)	6 (16.7%)	0.945
Follow up period (months)	37.57±20.61	32.48±17.08	41.11±22.29	0.093
Number of revision	1.66±1.41	1.08±0.86	2.06±1.59	0.007*
No of simple removal (%)	1 (3.3%)	0 (0%)	2(5.6%)	0.508
No of Conversion to AUS (%)	12 (19.7%)	6 (24%)	5 (13.9%)	0.312
Postop pad use	1.07±1.29	0.68±1.11	1.40±1.35	0.038*
No of success (%)	40 (65.6%)	18 (72.0%)	22 (61.1%)	0.379

Table 2. Comparison of preoperative factors between two groups classified by postoperative pad use of 1 or less

	Success group (n=40)	Failure group (n=21)	p value
Age	66.26±7.19	69.90±5.61	0.048*
Preop Radiation (%)	3 (7.5%)	7 (33.3%)	0.015*
IDC on preop UDS (%)	8 (20.0%)	7 (33.3%)	0.251
Preop Pad use	2.70±1.36	4.90±2.63	<0.001*
Cause of incontinence (%)			
Robot prostatectomy	29 (72.5%)	13 (61.9%)	0.396
Open Prostatectomy	11 (27.5%)	8 (38.1%)	