

NEW BONE-ANCHORED PERINEAL MALE SLING WITH COMPOSITE GRAFT FOR POST RADICAL PROSTATECTOMY INCONTINENCE-INTERMEDIATE RESULTS

Hypothesis / aims of study

The incidence of incontinence after radical prostatectomy has ranged from 2.5 to 87% depending on the series and the type of incontinence considered (1). Bone-anchored male sling has become popular treatment option for these men. We herein report the results of male sling in patients with post radical prostatectomy incontinence.

Study design, materials and methods

Twenty-six men with post radical prostatectomy incontinence secondary to sphincteric insufficiency who underwent bone-anchored male sling were evaluated retrospectively. Patients with previous salvage external beam radiotherapy and high serum PSA values, which may indicate recurrent disease, incontinence due to neurogenic or posttraumatic etiology, or following surgery such as TURP were excluded. Urodynamic evaluation to determine leak point pressure, maximal flow rate and detrusor instability was performed preoperatively. Bladder volumes and postvoiding residual volumes were also determined. The number of pads per day (PPD) that patients wearing were recorded preoperatively and during the visits postoperatively.

Results

The mean age of the patients was 67.8±8.2 (range 50-79) years. The mean follow-up period was 17.8±6.5 (range 6-26) months. The duration between the radical prostatectomy and male sling surgery was 64.3±38.7 (range 8-146) months. Preoperative mean bladder capacity, leak point pressure, maximal flow rate, and post voiding residual urine volume were demonstrated in Table 1.

Table 1. Preoperative urodynamic data of the patients (n=15)

	Mean±S.D.	Range
Bladder capacity (mL)	443.1±145.3	193-653
Leak point pressure (cmH ₂ O)	57.7±21.1	26-106
Maximal flow rate (mL/min)	13.7±5.1	6.1-23.9
Post void residual urine volume (mL)	12.1±24.1	0-100

S.D.; standart deviation

Table 2. Postoperative change in the number of pads with respect of preoperative incontinence type and degree of incontinence.

Preoperative type of incontinence	Preoperative degree of UI		Postoperative change in number of pads		Total
			Cured	Improved	
SUI	Preoperative degree of UI	Mild (1-2 PPD)	1	0	1
		Moderate (3-5 PPD)	7	8	15
		Severe (>5 PPD)	2	2	4
	Total	10	10	20	
Mixed	Preoperative degree of UI	Mild (1-2 PPD)	1	0	1
		Moderate (3-5 PPD)	4	1	5
	Total	5	1	6	
Total			15 (58%)	11(42%)	26

UI; urinary incontinence

Interpretation of results

Preoperatively 15% of the patients were completely incontinent, 77% of the patients required 3-5 PPD, and the remainder 8% of the patients required a mean of 1-2 PPD. All patients with stress incontinence and mixed urinary incontinence were cured or improved; defined as subjectively dry with no or only one pad used daily for security without any episode of leakage, or improved subjectively with a decrease of 50% or more in pads daily. The number of pads used preoperatively by the patients with either stress urinary incontinence (SUI) or mixed urinary incontinence was not statistically significant (chi-square=2.1, p=0.35) (Table 2). Either the degree of SUI or the type of incontinence did not effect outcome of the sling surgery (chi-square=1.6, p=0.44 for degree of SUI; chi-square=2.1, p=0.19 for type of incontinence) (Table 2).

Concluding message

The treatment of post radical prostatectomy incontinence continues to evolve with a notable resurgence of interest in the perineal man sling. The bone-anchored male perineal sling is a quick and simple procedure in the treatment of post radical prostatectomy stress urinary incontinence.

References

(1) Prevention and management of incontinence following radical prostatectomy. Urol Clin North Am. 2001 Aug;28(3):595-612