

IS THERE A ROLE FOR CONCOMITANT PUBOVAGINAL SLING AT THE TIME OF MIDURETHRAL SLING EXCISION FOR EROSION OR EXPOSURE?

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OBJECTIVE

- To compare the outcomes of concomitant vs. staged autologous fascia pubovaginal sling (AFPVS) in patients undergoing midurethral sling excision for tape related complication (i.e. erosion or exposure)
- To report the rate of recurrent stress urinary incontinence (SUI) and assess predictive factors.

METHODS

- A retrospective chart review of all patients who underwent midurethral sling excision for urinary tract erosion or vaginal exposure at a tertiary referral center between 2010 and 2015 was performed.
- Patients were divided in two groups: those with SUI before tape excision (SUI group), and those with no SUI before tape excision (no SUI group).
- Therapeutic strategies were categorized as concomitant AFPVS, staged AFPVS and no anti-incontinence procedure.
- Comparisons were made between concomitant AFPVS vs. no anti-incontinence procedure in the SUI group, and between the concomitant AFPVS vs. staged AFPVS.

RESULTS

- 32 patients were included for analysis: 13 with vaginal tape exposure (40.6%) and 19 with urinary tract tape erosion (59.4%).
- In patients who had SUI prior to sling excision (n=14; 43.8%), the rate of resolved/improved SUI postoperatively was higher in the concomitant AFPVS group (n=6) compared to those who underwent sling excision alone (n=8) (83.3% vs.12.5%; p=0.03), while the rates of postoperative complications were similar in these two groups (33.3% vs. 37.5%; p=0.99).
- Out of 18 patients with no SUI prior to sling excision, 12 experienced recurrent SUI after sling removal (66.7%).
- No predictive factors of recurrent SUI were found in univariate logistic regression analysis despite a higher rate of recurrent SUI in the urinary tract erosion group vs. vaginal exposure group (57.1% vs. 72.7%; p=0.63).
- The rates of resolved SUI after AFPVS were comparable in the six patients with concomitant AFPVS vs. the seven patients with staged AFPVS (66.7% vs. 71.4%; p=0.99) with similar postoperative complications rates (33.3% vs. 42.9%; p=0.99)

Predictors of SUI after sling excision: univariate analysis

	Odds-ratio [CI-95%]	p-value
Interval between sling placement and mesh excision	2.71 [0.11-8.31]	0.53
Body Mass Index	5.76 [0.11-13.42]	0.47
Age	4.08 [0.29-9.00]	0.45
Indication of mesh excision		
Vaginal exposure	1 [Ref]	-
Urinary tract perforation	2 [0.26-16.04]	0.49
Prior vaginal surgery	0.45 [0.16-13.07]	0.60
Concomitant urethroplasty	2 [0.27-18.76]	0.50

	Concomitant pubovaginal sling (n=6)	Subsequent pubovaginal sling (n=7)	p-value
Mean number of pads per day			
Baseline	5 (±1.3)	2.9 (±1.1)	0.27
1 month post-operatively	2.3 (±4.8)	0.5 (±0.8)	0.73
Change	-2.7* (±1.1)	-2.4* (±1.1)	0.94
Postoperative complications	2 (33.3%)	3 (42.9%)	0.99
De novo post-operative storage symptoms	3 (50%)	3 (28.6%)	0.59
Postoperative continence status			
SUI resolved	4 (66.7%)	5 (71.4%)	0.99
SUI improved	1 (16.7%)	2 (28.6%)	
SUI unchanged	1 (16.7%)	0 (0%)	
SUI worsened	0 (0%)	0 (0%)	

CONCLUSIONS

- Many patients with midurethral sling erosions or exposures will have SUI at initial presentation or develop SUI after removal of the synthetic sling.
- The present retrospective series suggests that the decision to perform a concomitant AFPVS at the time of tape excision for midurethral sling erosion or exposure, or to stage the surgical management of SUI can be individualized, as both therapeutic strategies appeared to be safe and effective..