Post-Operative Urinary Retention After Male Sling Insertion is a Positive Prognostic Indicator of Sling Success

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Introduction and Objectives
While urinary retention (UR) is an accepted complication of Advance Male Sling (AMS) placement for post-prostatectomy incontinence (PPI), no study to date identifies the proportion of patients who will experience UR in the immediate post-operative period. One may surmise that those patients who experience postoperative UR may have a superior outcome to those patients who pass their first trial of void (TOV). In this study, we investigate the incidence of immediate post-operative UR and evaluate whether those patient are ultimately more continent than those who initially pass their TOV.

Methods
Statistical analysis was conducted between men with and without post-operative UR to define if post-operative UR impacts overall continence. All patients were given an active TOV in the recovery room.

Results
A total of 35 patients were included in this study. Mean age was 63.4 (range 50 to 76). Mean follow-up was 11.8 months (range 0-42 months). The pre-operative mean pad weight was 169.5g/24 hours (range 7-477). Sixteen patients (46%) had post-operative UR (mean age 64.5 years) requiring either indwelling foley catheter placement or continuous intermittent catheterization (CIC). Nineteen patients (54%) had successful first TOV (mean age 62.6 years). Twenty-four patients had complete continence requiring zero PPD. Eleven patients required one or more PPD, of which, 36% (4 patients) were much improved and satisfied with the results. Eighty percent of patients (28 patients) were much improved or completely continent. Of the 16 patients in post-operative retention, 100% were completely continent (zero PPD) compared to 8 of 19 patients (42%) who passed first TOV (P=0.0002). On analysis, there was no statistically significant difference in pre-operative pad weight, 159.9g/24 hours in the postoperative UR group and 177.8g/24 hours in the successful TOV group (p=0.77). One patient received external beam radiation (XRT), one patient had bladder neck contracture (BNC), and one patient had both XRT and BNC. No patient required sling lysis. For patients with post-operative retention, no patient required either CIC or indwelling foley catheter for more than 7 days.

Conclusions
Post-operative urinary retention after AMS placement for PPI occurs in about fifty percent of patients, is short-lived and is a good prognostic indicator for sling success at mean follow-up of one year.