

Retrograde leak point pressure does not predict outcomes following male sling insertion

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Introduction

It has previously been identified that the only pre-operative predictor of success of male sling is pre-operative pad weight. Retrograde leak point pressure measurement (RLPP) is a urodynamic parameter that provides an objective measurement of external urethral sphincter's closure pressure.(1) RLLP has the advantage of being reproducible and simple to perform, and has previously been correlated to pad weight. (2) Therefore, we aimed to assess whether RLPP is independently predictive of male sling success.

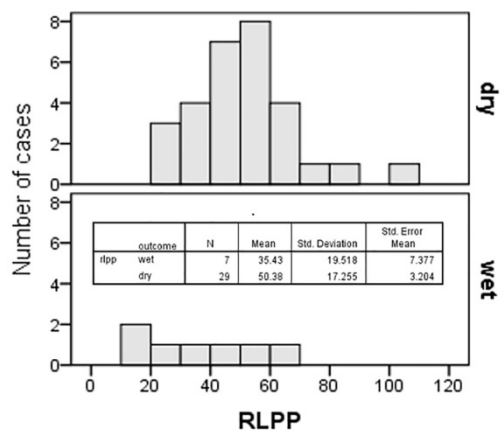
Materials and methods

Retrospective evaluation of 36 men, mean age 66 who underwent male sling for post prostatectomy incontinence (PPI) between 2012-2017. All patients had RLPP measured prior to surgery using standardized technique. Differences in RLPP for patients who were cured versus those that remained wet was analyzed using Student T-test with a p value <0.05 being significant.

Results

- mean follow up is 28.5 months (range 5-66)
- in 29/36 patients incontinence was cured (0 or 1 security pads/day) following male sling insertion (81%), and 7/36 (19%) remained wet
- four patients had temporary post-operative urinary retention, all of whom were in the dry group
- mean preoperative pad weight in the group who remained wet was 943g (range 14-3000), the mean pad weight in the cured group was 182g (range 20-586)
- mean RLPP for those cured was 50 cmH2O (range 22-100), for those who remained wet mean RLPP was 35 cmH2O (range 13-63), p=0.53

Figure 1. Histogram comparing RLPP values in patients with dry and wet outcomes



Conclusions

- Pad weight remains a strong predictor of success of male sling in this cohort. Whilst the trend was suggestive, RLPP did not reach statistical significance to independently predict male sling outcome. More data is required to develop pad weight and RLPP thresholds and predictive nomograms for PPI surgery

References

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2: Solomon E, Kass-Iliyya A, Malde S, Kirkham APS, Greenwell TJ, Ockrim JL. The correlation between retrograde leak point pressure and 24-hour pad weight. *Neurourol Urodyn*. 2017 Apr;36(4):1119-1123. doi: 10.1002/nau.23063. Epub 2016 Jul 4. PubMed PMID: 27376718.