

RETROGRADE LEAK POINT PRESSURE VERSUS 24H PAD WEIGHT FOR ASSESSING POST PROSTATECTOMY INCONTINENCE WITHIN THE SLING-VERSUS-SPHINCTER RANDOMIZED STUDY

Hypothesis / aims of study

Twenty-four hour pad-weight is the standard measurement of stress urinary incontinence (SUI) in men after radical prostatectomy. Poor patient compliance, variability according to patients' activity and fluid intake represent major disadvantages in reliability and reproducibility of this test. Retrograde leak point pressure (RLPP) measurement is a simple adjunct to urodynamic assessment and gives an objective measure of external urethral sphincter's closure pressure. We evaluated the correlation between RLPP and 24h pad-weight within a randomized study setting.

Study design, materials and methods

Fifty-three consecutive men enrolled in the Sling versus Sphincter (2-arm randomized controlled study) at a tertiary centre between February and September 2013 were evaluated for surgical intervention. Patients collected 24h pad tests in two separate periods and the mean calculated. RLPP were performed using a standardised (Comiter) technique using a paediatric cuff and 5ml/min perfusion rate. The pressure plateau achieved when the sphincter pressure is exceeded was recorded.

Results

Mean 24h pad weight was 402 ± 425 mls, and mean retrograde leak point pressure was 35.7 ± 15.3 cm water. Patients with higher pad weights had significantly lower RLPP measurements, Spearman's correlation coefficient $r=0.59$, $p<0.0001$ (see figure 1). An RLPP less than 22 CmH₂O correlated well with pad weights of more than 400 mls. RLPP less than 36 CmH₂O correlated well with pad weights of more than 200 mls.

Interpretation of results

There is a strong correlation between RLPP and pad weight.

Log (pad weight)

Concluding message

RLPP could be used as a more reliable and objective substitute to pad weight in assessing the severity of incontinence in men after radical prostatectomy, as well as predicting outcomes for sling and sphincter surgery.

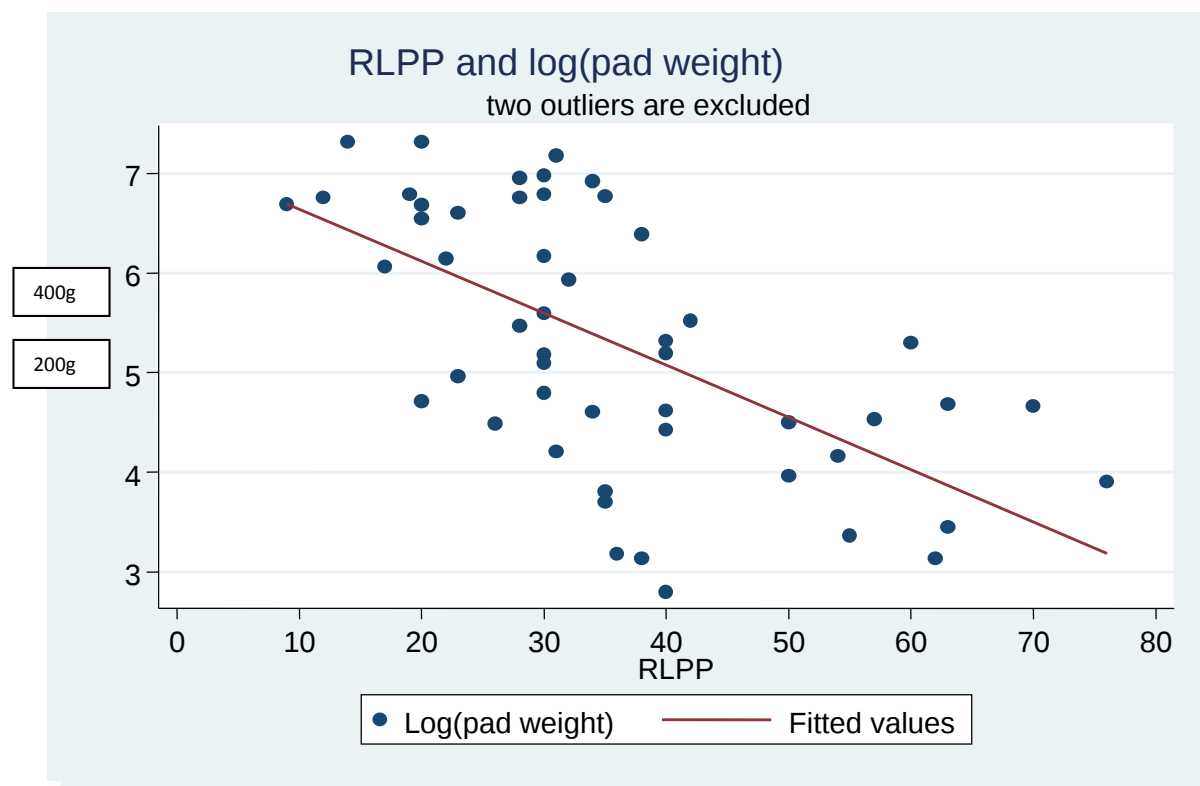


Fig (1): Scatter plot diagram showing the significant correlation between RLPP and 24h pad weight in post prostatectomy (two outliers >2000mls pad loss have been removed from the diagram for visual clarity)

References

1. Comiter CV, Sullivan MP, Yalla SV. Retrograde leak point pressure for evaluating postradical prostatectomy incontinence. Urology. 1997;49(2):231-6

Disclosures

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