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THE MALE PERINEAL SLING ENHANCES THE DISTAL SPHINCTERIC MECHANISM: FLUOROURODYNAMIC STUDY

Aims of Study

The male perineal sling is a relatively new procedure for post prostatectomy incontinence that can be performed entirely through a perineal incision on an outpatient basis. Short-term results have been encouraging with 70% of patients becoming dry and another 10% showing improvement. (1) No urinary retention has been encountered. As with other sling procedures, the exact mechanism by which the male perineal sling restores continence is controversial. Clemens et al reviewed urodynamic results of their bulbourethral sling and concluded that, although Valsalva leak point pressures (VLPP) increased, resting urethral pressures did not change appreciably. (2) Functional urethral length was not included in their report. The objective of this study is to show the possible mechanisms behind the male perineal sling in achieving continence.

Methods

Twenty eight patients have undergone the male perineal sling using Cadaveric fascia lata (Suspend®), which is fixed with bone anchors to the pubic arch bilaterally over the bulbomembranous junction. All patients are discharged without a foley catheter within 24 hours, if not the same day. All patients underwent preoperative multi-channel urodynamics. We reviewed the post-operative urodynamic studies of a small cohort of our continent patients who agreed to have the study and compared these results to studies performed on failures hoping to shed light on the possible mechanism of continence in these patients. All post-operative urodynamics were done with fluoroscopy using standard multichannel techniques. Post-void residuals were measured and flow rates recorded and compared to preoperative values as well.

Results

Success is defined as the patient being dry or at least 50% improved with regard to pad use. The VLPP pressures increased in all patients except for one failure. The average VLPP was 123.8 cm H20 postoperatively compared with 78.5 cm H20 preoperatively with the successes having higher VLPP's. Preoperative maximum resting urethral pressure (MUP) was 34.3 cm H20 and postoperative MUP was 45.2 cm H20. There was no consistency with regard to change in MUP and continence status. The functional urethral length increased in all patients. Flouroscopically, the maximal urethral pressure was consistently found at the level of the visualized bone screws. Maximum flow rates and post-void residuals did not appreciably change indicating no obstructive nature to the sling. In addition, there appears to be augmentation of the urethral and pelvic floor guarding reflex as evidenced by increased urethral pressures on filling and shortened EMG latencies with regard to first rise in intraabdominal pressures.

Conclusions

The male perineal sling is a non-obstructive simple anti-incontinence procedure that enhances the function of the external sphincter. Maximum urethral pressures are not appreciably altered despite increases in Valsalva leak-point pressures.

References

1. Male perineal sling. 2001. Techniques in Urology Vol 7., No. 3:229-32.
2. Urodynamic analysis of the bulbourethral sling procedure. 1999. J Urol 162:1977-82