

A NEW SLING FOR THE TREATMENT OF MALE URINARY INCONTINENCE

Hypothesis / aims of study

Male urinary incontinence is one of the most bothersome complications after radical prostatectomy. The use of artificial sphincter (AS) provides satisfactory results, but has a high cost, what is paramount in urological practice nowadays. Many male slings were developed, but none of them have better results than AS. The objective of this study is to demonstrate a new male sling that can be used in incontinent patients after prostate cancer surgery.

Study design, materials and methods

Seven patients with urinary incontinence secondary to retropubic surgical treatment of localized prostate cancer were offered treatment with sling and informed consent was obtained. Their age ranged from 54 to 73 (mean 64.3 years). Physical examination, urodynamic study and urine culture were performed preoperatively. All patients received the new Promedon™ male sling, which is made of a silicone foam pad with two columns of sequential silicone beads in small conical shape and a pair of washers to maintain the sling traction (Figure).

The International Consultation on Incontinence Questionnaire – Short Form (ICIQ-SF) was performed before and three months after the surgery. The subjective improvement was also evaluated asking the patients how much they felt improving.

Results

The follow up ranged from 22 months (mean 12.6 months). Their pre-operative ICIQ-SF questionnaire values ranged from 17 to 21 (median 19) and 3 months after the surgery ranged from 0 to 20 (median 11), with subjective improvement of 60% (range from 0 to 100%). There were 2 patients that presented complete failure because of extrusion, one patient was diabetic and developed urinary and wound infection and the other had extrusion secondary to excess of tension, in order to correct a severe incontinence. One patient presented post-operative urinary retention and the sling was readjusted, losing the washers, with satisfactory results and continence.

Interpretation of results

Perineal sling is becoming an attractive option in the treatment of post-prostatectomy urinary incontinence because of its lower costs, effectiveness and ease of use. Many slings were tested, with impressive results. Long-term follow-up have demonstrated comparable but not better results when compared to artificial sphincter [1] and many materials were compared. One with superior outcome is the sling made of synthetic silicone mesh [2]. Our silicon sling demonstrated a satisfactory rate of continence and quality of life improvement (ICIQ-SF). Unfortunately two extrusions occurred, bringing down the results. Lessons that are paramount to be remembered are correct tension and caution in diabetic patients.

Concluding message

This new silicon sling offers a 60% continence satisfaction, with 71,4% of continence improvement or cure. The main advantage is the possibility of readjustment due to the conical shape of the columns and the use of washers. Although a small number of patients have been treated, it may be an alternative for post-prostatectomy incontinence with lower cost.

2. The male perineal sling: comparison of sling materials. J Urol. 2004 Aug;172(2):608-10.

Figure



Figure: Male silicone sling.