

VAGINAL URETHROLYSIS FOR VOIDING DYSFUNCTION FOLLOWING MID URETHRAL SLING

Hypothesis / aims of study

A long term follow up of women who underwent division of mid urethral sling.

Study design, materials and methods

A retrospective follow up study of vaginal urethrolysis and division of mid urethral sling. Women were questioned regarding current urinary symptoms and further anti incontinence surgery.

Results

31 women underwent division of mid urethral sling. Median age at surgery was 64 years (range 35-83). Prior to undergoing mid urethral sling procedure, all women underwent urodynamic studies. 2 women had voiding dysfunction prior to the sling operation. Procedures performed included TVT (26), donor fascia sling (3), mesh sling (1) and IVS (1). 21 of the women had undergone pelvic surgery prior to the mid urethral sling procedure: TAH (7), vaginal hysterectomy (6), radical hysterectomy (1), vaginal repair (10).

Following sling procedure, all women described voiding dysfunction, 12 women also complained of urgency and two women had ongoing stress incontinence. Prior to division of the sling, mean residual urinary volumes were 372mls and mean flow rate was 6ml/s.

Mean time from midurethral sling until division of sling was 21.5 weeks. All sling divisions were performed using a vaginal urethrolysis and division of the sling. Complications included 4 urethrotomies. All of the urethrotomies were managed with a immediate repair in layers, prolonged drainage by catheter and no fistulae developed.

Average follow up time was 25 months following division of the mid urethral sling. 30 women were available for follow up. 1 woman was deceased. 3 women had undergone abdominal retropubic urethrolysis. 8 women had undergone further surgery for urinary stress incontinence. The remaining women had either no further stress incontinence or mild stress incontinence, not requiring further surgery.

Delayed urethrolysis and division of sling may be difficult because of difficulty visualising the sling material. Our surgical technique for managing these cases will be described.

Interpretation of results

This long term follow up shows that in most cases (27/30) voiding dysfunction following mid urethral sling can be treated by vaginal urethrolysis and division of the sling. This confirms other smaller series with similar success rates. [1] After division of sling, urinary stress incontinence recurred in 9 of 30 women and 8 women required further surgery for stress incontinence.

Concluding message

Prolonged urinary retention following mid urethral sling is an uncommon complication reported in 2-12% of patients.[2] Treatment of this complication can be successfully performed with a vaginal urethrolysis and division of the sling. Recurrence of stress incontinence in the long term can occur in up to 30% of patients.

Reference

1. Simple sling incision for the treatment of iatrogenic urethral obstruction. *Urology* 2003;62:714-718.

2. Rising awareness of the complications of synthetic slings. *Curr Opin Urol* 2004;14:317-21.