

## LAPAROSCOPIC BURCH COLPOSUSPENSION AFTER FAILED SUBURETHRAL TAPE PROCEDURES: A RETROSPECTIVE AUDIT.

### Hypothesis / aims of study

The aim of this study was to evaluate the outcome of laparoscopic Burch colposuspension in women with recurrent stress urinary incontinence after failed primary suburethral tape procedures

### Study design, materials and methods

Sixteen patients who underwent a laparoscopic Burch colposuspension after previous failed suburethral tape procedures between January 2002 and August 2006. Laparoscopic Burch colposuspension procedure was performed with the use of two non-absorbable sutures each side. Two patients were identified with symptoms of mesh erosion which were treated well before performing surgery for recurrent stress urinary incontinence. Demographic data, pre-operative multi-channel subtracted urodynamic results and surgical outcome measures were obtained from chart review. Postoperative review included an urogynaecological assessment and urodynamic studies. At the same time, patients were requested to complete a validated questionnaire and to score their satisfaction on a scale from 1-10.

The primary outcome measure was cure of stress urinary incontinence based on urodynamic studies. Secondary outcome measures included subjective cure rate based on a validated questionnaire, patients satisfaction score, and the development of voiding problems, urgency, urge incontinence and vaginal prolapse.

### Results:

Postoperatively, two patients were lost for follow up and 3 patients refused urodynamic testing after surgery. In one case, laparoscopic colposuspension was converted to an open approach due to dense adhesions in the cave of Retzius. Mean follow up was 27 ±15.25 months (range: 3 – 58).

Table 1: clinical and demographic characteristics of our study group:

Characteristics	Patients (n=16)
Age (y) (mean ± SD) (range)	51.53 ± 9,1 (38 – 66)
Parity (median, range)	3 (1 – 4)
Body mass index (Kg/m <sup>2</sup> ) (median, range)	24 (19 – 33)
Stress urinary incontinence: n (%)	12 (75.0)
Mixed urinary incontinence: n (%)	4 (25.0)
Previous tape surgery :n (%):	
▪ TVT	8 (50.0)
▪ TVT-O	2 (12.5)
▪ IVS	6 (37.5)
Tape related complications (erosion): n (%)	3 (21.4)

Table 2: Per and postoperative data:

Dense fibrosis: n (%)	9 (56.3)
Hospital stay (days) (mean ± SD) (range)	3.36 ± 0.92 (2 – 5)
Indwelling catheter (days) (mean; range)	1 (1-7)
Peroperative complications	
▪ bladder injury: n (%)	1 (6.25)
Early post-operative complications	
▪ transient voiding dysfunction: n (%)	1 (6.25)

Table 3: Objective and subjective cure rate for SUI and patients satisfaction score:

Objective cure rate	Patients (n=11) (%)
▪ no incontinence	6 (54.5)
▪ slight incontinence	3 (27.3)
▪ marked incontinence	2 (18.2)
▪ postoperative improvement	9 (81.8)
Subjective cure rate	Patients (n=14) (%)
▪ no incontinence	8 (57.2)
▪ occasional incontinent	6 (42.8)
▪ frequent incontinent	0
▪ postoperative improvement	13 (92.8)
<b>Patients satisfaction score (mean, range)</b>	<b>9.36 (6 – 10)</b>

One patient needed intermittent self-catheterisation for 3 days and 1 patient was diagnosed with de novo OAB on urodynamic testing. No obstructed voiding pattern could be demonstrated postoperatively. All but one patient (92.3%)

reported subjective symptoms of urge incontinence prior surgery. Postoperatively, 8/13 patients (61.5%) reported improvement of urge incontinence, 3/13 (23.1%) noticed no difference and two (15.4%) felt that symptoms got worse. No increased incidence of postoperative pelvic organ prolapse could be demonstrated.

#### Interpretation of results

We were able to demonstrate an improvement of 81.8% and 92.8% respectively for objective and subjective symptoms of SUI after laparoscopic Burch colposuspension for treatment of recurrent SUI after failed suburethral tape procedures. A high percentage of patients did report subjective symptoms of an OAB preoperatively which improved in 61.5% of the patients after the surgery. A possible explanation for this finding could be the dense fibrosis that was found in 56.3% of the patients and which was divided at the time of surgery.

Overall, patients felt highly satisfied with their outcome of surgery.

#### Concluding message

Laparoscopic Burch colposuspension appears to be a valid treatment for recurrent stress urinary incontinence after failed suburethral tape procedures, however a larger study group and long term follow up data are needed.

**FUNDING:** None

**CLINICAL TRIAL REGISTRATION:** This clinical trial has not yet been registered in a public clinical trials registry.

**HUMAN SUBJECTS:** This study was approved by the Human Research Ethics Committee of the Royal Brisbane and Women's Health Service District and followed the Declaration of Helsinki Informed consent was obtained from the patients.