

OUTCOME OF DIVISION OF TAPE FOLLOWING SUBURETHRAL SLING PROCEDURES- A RETROSPECTIVE REVIEW.

Hypothesis / aims of study

New minimally invasive sling procedures have become first line procedures for the surgical correction of urodynamic stress incontinence (USI), with excellent cure rates and a low rate of side effects. Voiding dysfunction occurs in up to 15% of patients. If voiding dysfunction persists, surgical division of the tape may be necessary, although there are few papers which report on the outcome following this procedure. We have evaluated the outcome of tape divisions following suburethral sling procedures in our unit.

Study design, materials and methods

A retrospective review of the case notes of all patients who underwent division of a suburethral tape between January 2000 and December 2004 was undertaken. Preoperative data, operative data, and post operative data were extracted and recorded. The urodynamic findings before and after tape division were also recorded, together with the reasons for tape division and the need for further treatment following tape division.

Data were analysed using SPSS v 12. Data are presented as number (%) or median (range).

Results

Nineteen patients were identified. The median age was 62 years (29-90), and BMI 30 (21-41). Twelve patients (63%) had previously undergone hysterectomy, 5 (26%) prolapse surgery and 4 (21%) incontinence surgery. Prior to insertion of suburethral sling, 14 patients (64%) had USI and 2 patients (11%) had both USI and detrusor overactivity (DO). One patient (5%) had a normal urodynamic recording, and two urodynamic recordings were unavailable.

The median residual was 0 ml (0-120) and the median maximum flow rate was 22.7ml/sec (8.1-43.8). The maximum flow rate was less than 15ml/sec in 3 patients (16%) and the residual volume was more than 100 ml in one patient.

Eighteen patients (95%) had a TVT inserted (two with concurrent prolapse repair), and one had a TVT-O inserted with prolapse repair. Twelve patients (63%) had local anaesthesia, 4 (21%) regional anaesthesia, and 3 (16%) general anaesthesia. All conscious patients except 3 (16%) had the tape tensioned by cough testing.

The median interval from the procedure to the division of tape was 26 weeks (4-150). Three patients (16%) had the tape divided due to de novo overactive bladder (OAB) symptoms or worsening of preexisting OAB symptoms. Seven patients (37%) had voiding difficulty (defined as a requirement for intermittent self catheterisation) or were dissatisfied with their subjective assessment of voiding function, despite normal residual volumes. A further 7 patients (37%) had both OAB symptoms and voiding difficulty. Two patients (11%) had the tape divided due to erosion of the tape into the vagina and one of these two patients also had associated voiding difficulty.

Following division patients were reviewed at 10 weeks (6-16). Follow up data were not available for 2 patients. Eight patients (47%) developed recurrent stress incontinence symptoms. Eleven of the 13 patients with voiding difficulty (85%) reported resolution of those symptoms, but only 2 of the 10 patients with OAB symptoms (20%) reported resolution. Overall 8 patients (47%) reported a sufficient improvement to be satisfied with the outcome.

Interpretation of results

The need for division of the tape was uncommon, occurring in 4% of patients who underwent the procedure. Voiding difficulty and overactive bladder symptoms were the commonest reason for tape division. Division appears to be successful in resolving voiding difficulties but carries a significant risk of recurrent stress incontinence. Furthermore, de novo OAB symptoms appear not to improve after division.

Concluding message

Tape division appears to be only moderately successful if done to relieve OAB symptoms in our series, which is one of the largest published. These data will be useful for pre-operative

counselling for patients contemplating suburethral sling placement, and also for those contemplating division for troublesome post-operative symptoms.