

VOIDING DYSFUNCTIONS AFTER MIDURETHRAL SLING PLACEMENT IN A LARGE DATASET COHORT

Hypothesis / aims of study

Midurethral slings (MUS) are the current standard surgery for stress urinary incontinence (SUI). Among complications, post MUS voiding dysfunction (VD) can significantly affect patient QoL. Our primary aim was described the rate of VD in a large dataset of MUS patients.

Study design, materials and methods

A retrospective analysis of our prospectively collected database was performed. Inclusion criterion: patients who underwent MUS (TVT or TOT) between 2008 and 2016 with at least 1 follow-up (F/U) visit. Procedures were carried out by 5 trained-urogynecologists. ICS/IUGA VD definition included the presence of any of the following: hesitancy, slow stream, intermittency, straining to void, spraying of urinary stream, feeling of incomplete bladder emptying, need to immediately re-void, postmicturition leakage or position-dependent micturition. Rates of recurrent SUI (subjective complaint of SUI or leakage during exam), mesh extrusion and de novo urgency were also evaluated. Data is shown as percentage or median (IQR).

Results

875 patients underwent MUS in the study period, 82 did not had f/u and were excluded, therefore we analyzed 793 patients. Of these, 44.9% (393) were TOT and 55.1% (482) TVT. 70% (612) were hand-made slings and 30% (263) were commercial kits. Median age was 54 (± 10.1) years. 24% (212) had a concomitant apical prolapse repair and 26.1% had a concomitant anterior and 18.4% had posterior colporrhaphy. In the TVT group there was a 2.1% risk of bladder perforation. 82 (9.4%) patients developed VD in a median time of 8 months (2-20) after surgery, of whom 10 patients (12% of the VD patients) underwent a mesh removal. VD was present in 9.2% of TOT and 9.5% of TVT. The most frequent VD symptom were slow stream (5%), feeling of incomplete bladder emptying (4%) and need to immediately re-void (3.7%). In other outcomes, 9.3% had recurrent objective or subjective or reintervention for SUI. 2.1% developed a mesh extrusion and 6.5% developed de novo urgency during f/u. In a univariable analysis the following were associated with VD: type of incontinence, concomitant colporrhaphy, POP –Q stage III or IV, active smokers. In a Cox proportional analysis including these variables, age, concomitant apical repair, the following variables persist significant associated with VD: concomitant colporrhaphy OR 0.47 (CI 95% 0.26-0.85), POP –Q stage III or IV OR 2.6 (CI 95% 1.3-5.1) and active smokers OR 0.5 (CI 95% 0.3-0.9).

Interpretation of results

In our cohort VD are a common complication affecting 9.2% of patients. Concomitant anterior or posterior colporrhaphy and the use of tobacco were protective factors for VD. The only risk factor was severe prolapse (Stage III or IV) increasing the risk by 2.6 fold. In our cohort 90.8% of MUS patients had SUI resolution and a low rate of complications.

Concluding message

IVD are a common complication of MUS procedure.

Disclosures

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