

Miduretral “sling on a string”: A mesh free option for stress urinary incontinence in women

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Objective

The aim of this study was to evaluate outcomes and complications related to midurethral fascial “sling on a string” (MFSS) technique for stress urinary incontinence..

Design

This is a retrospective observational study.

Method

Women who underwent to MFSS technique in a tertiary centre after failing to initial conservative measures to stress urinary incontinence between 2010 and 2019 were analyzed. Inclusion criteria were Mixed or Stress Urinary Incontinence with or without genital prolapse. The patients were submitted to preoperative urodynamics and two postoperative follow up visits at 1 month and 6 months.

Technique

Smaller skin incision
Mid-urethral position
1.5 x 6.0 cm graft
Suspended by polypropylene sutures



Fig 1. Incision

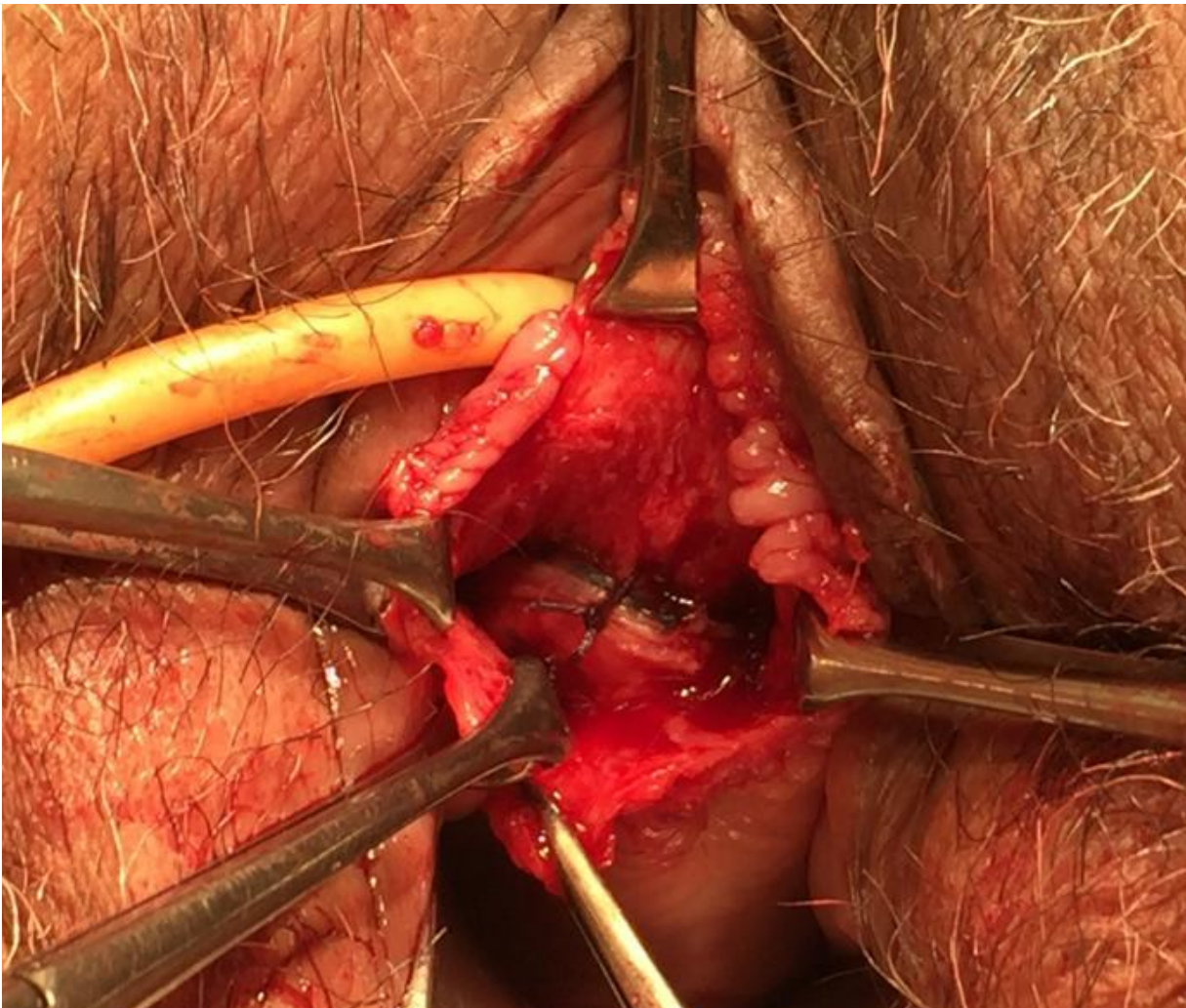


Fig 2. Midurethral position



Fig 3. Graft

Results 149 patients underwent MFSS and 6-month was available for 144/149 patients and therefore they were included for study 93,3% of patients had improvement and reported they were satisfied with the procedure at 6-month follow up and 90,7% had subjective cure at this point..Patients had prolapse surgery concomitant to SUI technique they had similar results to patients who had SUI surgery alone..

Table 1. Demographics

Mean Age	54.6 +/- 10.2 years (34 to 79 years)
Mixed Urinary Incontinence (pre-op)	62/144 (43.0%)
Prolapse (> grade 2) -concomitant repair	83/144 (57.6%)
Anterior colpoplasty	48/144 (33.3%)
Posterior colpoperineorrhaphy	52/144 (36,1%)
Vaginal Hysterectomy	18/144 (12.5%)
Sacrocolpopexy/ Sacrospinoux Fixation	3/144(2.0%)

Table2. Complications

Voiding difficulties < 30 days	7 (4.86%)
Voiding difficulties >30 days	4 (2.77%)
Re-intervention/urethrolysis	2 (1.39%)
Bladder injury	1(0.69%)
Urethral injury	1(0.69%)
Wound infection	14(9,7%)
Urinary infection	13(9,9%)
Abdominal hernia	3 (2,0%)
Wound haematoma	7 (4.86%)

Conclusions: MFSS is an evolution of traditional aponeurotic slings. It has very good results at short term and few complications, even in patient with mixed symptoms and prolapse surgery concomitant . Nowadays MFSS is a low cost no mesh surgery that need be part of surgical options for pelvic floor surgery.