373: A Staged Midurethral Sling Strategy for Symptomatic SUI and Pelvic Organ Prolapse

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Introduction

- Stress urinary incontinence (SUI) affects 30-80% of women having pelvic organ prolapse surgery
- Data regarding outcomes of a staged midurethral sling (MUS) strategy in women with preoperative SUI undergoing prolapse repair are limited:
  - Resolution of preoperative SUI occurs after 30-60% of vaginal prolapse repairs
  - With a staged approach, up to 66% of women will not undergo a planned MUS

Objectives

- To determine the proportion of women who experienced resolution of SUI after minimally invasive sacrocolpopexy or uterosacral ligament suspension without a concomitant incontinence procedure
- To assess the proportion of women who underwent staged MUS
- To assess clinical characteristics associated with resolution of SUI and staged MUS placement

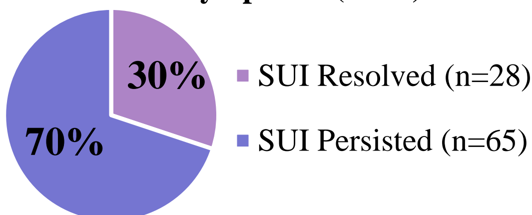
Methods

- Retrospective, observational cohort study
- Minimally invasive sacrocolpopexy or uterosacral ligament suspension, 2009-2015
- Inclusion: Preoperative SUI
  - Subjective: patient reported symptoms
  - Objective: leak with cough or Valsalva on cystometry or multichannel urodynamics
- Exclusion: Concomitant incontinence procedures
- Primary Outcome:
  - Proportion of women with subjective resolution of SUI after prolapse repair
- Secondary outcomes:
  - Proportion who underwent staged MUS
  - Timing of staged MUS placement
  - Clinical characteristics associated with resolution of SUI and staged MUS
- T-tests, Mann-Whitney U, Chi-Square, Fisher's Exact, and exploratory multivariable logistic regression analyses (SPSS® 24)

Results

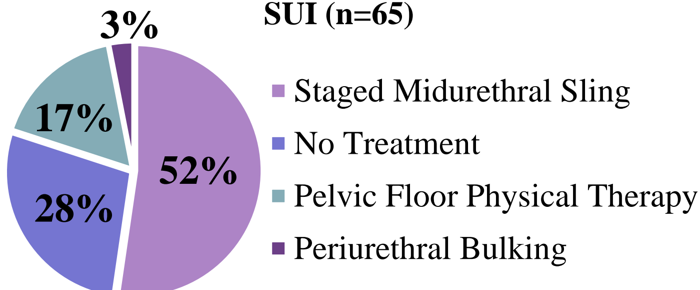
- 73 minimally invasive sacrocolpopexies (78.5%) and 20 uterosacral ligament suspensions (21.5%)

Figure 1. Outcomes of Preoperative SUI Symptoms (n=93)



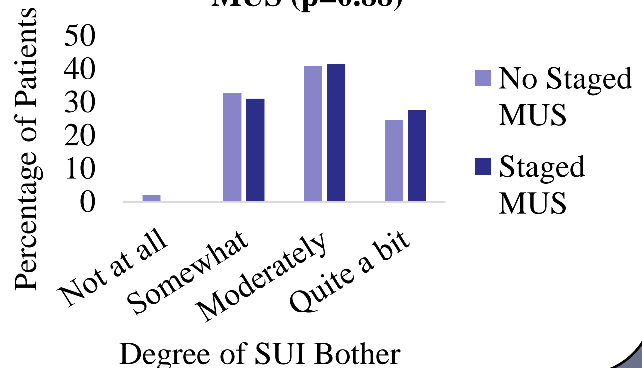
- Of the entire cohort, 47 women (50.5%) received treatment for persistent SUI
  - MUS (n=34, 36.6%)
  - Pelvic floor physical therapy (n=11, 11.8%)
  - Periurethral bulking (n=2, 2.2%)

Figure 2. Outcomes of Women with Persistent SUI (n=65)



- Median follow-up 8.3 months (IQR 3.4-26.7)
- Of the staged MUS, 79.4% (n=27) were performed within 12 months of prolapse surgery
- Median time to MUS was 5.5 months (IQR 4.2-9.9)
- Obese women had a 70% lower odds of resolution of SUI after prolapse repair (OR 0.28, 95% CI 0.08-0.95)
- Preoperative Urogenital Distress Inventory (UDI) SUI bother was not associated with SUI resolution (OR 0.98, 95% CI 0.23-1.64)
- No factors associated with staged MUS placement

Figure 3. Preoperative UDI-6 SUI Bother in Women who did and did not have a Staged MUS (p=0.88)



Conclusions

- Nearly 1 in 3 women reported resolution of preoperative SUI after minimally invasive sacrocolpopexy or uterosacral ligament suspension without a concomitant incontinence procedure
- Only 37% of women underwent a staged MUS
- A staged approach to treatment of preexisting SUI may result in a nearly two-thirds reduction in placement of MUS
- Counseling for concomitant MUS should include the possibility of SUI resolution