MIDURETHAL SYNTHETIC SLING INCISION IS NOT ALWAYS SUFFICIENT: A CASE SERIES

Hypothesis / aims of study
To assess the presentation and management of women with residual lower urinary tract symptomatology (LUTS) after prior mid-urethral sling (MUS) incision.

Study design, materials and methods
Following IRB approval, a prospective MUS removal database of over 360 women was reviewed for non-neurogenic women who presented with continued LUTS despite a history of one prior sling incision. Data reviewed by a neutral investigator not involved in patient care included demographics, presenting symptomatology, and outcomes after vaginal sub-urethral sling excision. The technique of sling excision has already been described [1] and involves a vaginal approach to remove the portion of the sling extending from the 3 to the 9 o’clock position underneath the urethra. There was no concomitant procedure done to the women in this series.

Results
From 2006-2015, 18 patients were identified. Mean age was 55 ± 12 years. Median time from initial placement to sling incision was 12 (range 1-108) months. Following sling incision, residual LUTS were treated with various therapies but without LUTS resolution. Evaluation consisted of history, examination, and testing such as cystoscopy, translabial ultrasound, urodynamic, and/or voiding cystogram based on presenting symptoms and examination findings. Indications for sling excision were obstruction (3), obstruction and pain (2), persistent vaginal pain/dyspareunia (9), recurrent vaginal exposure/dyspareunia (2), worsening urgency incontinence (1) and mixed urinary incontinence (1). Median time from sling incision to sling excision was 55 (range 5-146) months. Median follow-up after MUS excision was 12 months (range 6-45 months). Obstruction (5) and exposure (2) were all cured. Vaginal pain and dyspareunia improved in 8 of 11 women and UUI improved in one. Three women had persistent SUI and 1 developed recurrent SUI. Two women were treated satisfactorily with bulking agents, one with fascial sling, and one with bulking agent followed by a fascial sling.

Interpretation of results
Following a sling incision for early obstructive symptoms, some women may continue to experience bothersome LUTS. Many are treated for various conditions but seldom the notion that they could still be obstructed emerges. During our evaluation these patients were still found to be obstructed or had LUTS as a direct result of the incised sling remaining stiff and embedded in scar tissue. This series indicates that a majority of these patients benefited from a suburethral sling excision.

Concluding message
Sling incision may not always resolve LUTS. In a subset of women, sling excision may eventually be needed, with variable outcomes.
**Figure 1:** Translabial three dimensional ultrasound reconstruction demonstrating the course of a transobturator tape with left and right sided arms separated by a groove at the 5-6 o’clock position inferior to the urethral lumen where the prior incision took place. The operative note of this patient did not detail the site of the MUS incision.

![Image of ultrasound reconstruction](image_url)

**Figure 2:** Vaginal extrusion of MUS

![Images of MUS extrusion](image_url)

**Case 1**

**Case 2**

**References**

**Disclosures**

**Funding:** The Cain Foundation  
**Clinical Trial:** No  
**Subjects:** HUMAN  
**Ethics Committee:** UT Southwestern Medical Center Institutional Review Board  
**Helsinki:** Yes  
**Informed Consent:** Yes