191

Bacsu C[1], Hou J[1], Alhalabi F[1], Lee D[1], Dillon B[1], Zimmern P[1]
1. *UT Southwestern Medical Center*

TWO FAILED SYNTHETIC MID-URETHRAL SLINGS: AND NOW WHAT?

Hypothesis / aims of study
Because there is scant data regarding management after 2 or more failed synthetic mid-urethral slings (MUS), we reviewed our experience in a tertiary care center.

Study design, materials and methods
Following IRB approval, a retrospective chart review of non-neurogenic, symptomatic women requiring re-operation after 2 or more synthetic MUS was performed. Data assessed included demographic characteristics, prior anti-incontinence/ genitourinary surgery, complications, pelvic/ urinary symptoms, subsequent investigations, treatments and associated outcomes reviewed by third party not involved in patient care. Cure was defined as continent, pain-free, sexually active if active pre-operatively, and not requiring additional medical or surgical therapy.

Results
Between 2007 and 2012, 14 patients meeting inclusion criteria were identified [mean age 55, (40-70)] with one or more symptoms of urinary incontinence (86%), incomplete bladder emptying (71%), recurrent UTIs (57%), dyspareunia (50%), erosion involving the urinary tract (21%), and/or recurrent vaginal extrusions (21%). Patients had a mean of 3 prior anti-incontinence procedures (2-5) including 2 MUS, and an average time to referral of 3.7 years (2 months-10years). Over two-thirds had a combination of retropubic and trans-obturator MUS. Mean number of pre-operative investigations was 3.5 (1-6) including voiding cystourethrogram, cystoscopy and urodynamics in most patients. After evaluation, treatment was individualized, with the majority (12/14) requiring transvaginal excision of both MUS (Table 1). At a mean follow-up of 16 months (1-56), 2 patients were cured, 8 had partial improvement but residual symptoms, 2 with no perceived improvement and 1 lost to follow-up (Table 1).

Interpretation of results
There is a growing number of patients who have been treated with repeat synthetic MUS for persistent/recurrent SUI following a failed MUS in the literature. Despite this trend of repeat MUS placement and decreased success rates compared to primary MUS placement, very little is reported regarding outcomes of those who fail 2 or more MUS. At our institution, most common reasons for referral after 2 or more failed MUS included incontinence, voiding dysfunction, recurrent UTIs and dyspareunia. A uniform evaluation and treatment strategy cannot be applied to these challenging patients as their presentations and clinical scenarios are variable. The relative ease of a 2nd MUS should be balanced against the complexity of subsequent management should this secondary sub-urethral tape procedure fails and this should be clearly communicated to the patient.

Concluding message
The evaluation and management of women who have failed 2 or more synthetic MUS were complex resulting in a low permanent cure rate and frequent need for additional therapies. Although a 2nd MUS can yield a satisfactory outcome after initial MUS failure, the likelihood and consequences of failure of subsequent MUS should be presented to the patient. Before the wide adoption of additional MUS placement as a standard treatment for failed MUS, further investigation of the outcomes of the patients with 2 or more MUS failures is warranted.

Table1. Outcome after 2 failed mid-urethral slings.

Pt	Age	Primary complaint	# of MUS	Primary treatment after referral	Additional treatment	Upcoming surgery	Residual Symptoms	Cure*	F/u (months)
1	52	Mixed Incontinence	2	MUS excision AVWS	Anticholinergics + PFE		U	Yes	56
2	40	Dyspareunia	2	MUS excision	Collagen injection	PV sling	F/U/D/UI/ E/P/S	No	41
3	57	UTIs	2	MUS excision	AVWS	Augmentation cystoplasty	F/U/UI	No	25
4	53	Incontinence	2	VVF repair Vaginal Mesh/ MUS excision	Hydrodistension PV sling Macroplastique ™ Anticholinergics		F/U/UI/E	Partial	21
5	70	Mixed Incontinence	2	Collagen injection	Augmentation cystoplasty		U	Yes	20
6	58	Urethral erosion	2	Holmium laser	2nd Holmium laser 3rd Holmium laser		F/U/D/UI	Partial	15

7	51	Dyspareunia	3	MUS excision			F/D/UI	Partial	15
8	51	Dyspareunia	2	MUS excision	Anticholinergics PFE		UI/P	Partial	10
9	64	Mixed Incontinence	2	MUS excision			F/U/D/UI/ E	Partial	8
10	42	Mixed Incontinence	2	MUS excision			F/U/UI	Partial	4
11	55	Recurrent bladder stones	2	RP removal of sling arms			F/U/UI/E	Partial	3
12	66	Incontinence	2	UVF repair MUS excision	Anticholinergics		UI	Partial	2
13	68	Dyspareunia	2	MUS excision			Not known yet	Partial	1
14	46	Mesh infection	2	MUS excision PV sling			?	Unknow n	3*

Abbreviations:
Pt-patient, F/u-follow up, AVWS- Anterior vaginal wall suspension, PFE- Pelvic floor exercises, RP-retropubic, PV-Pubovaginal Fascial, VVF- Vesicovaginal fistula, UVF- Urethrovaginal fistula
Residual symptoms:
F-Frequency, U-Urgency, D-Dyspareunia, UI-Urinary incontinence, D-D, E-Incomplete emptying, P-Pain
♠Cure=dry, pain-free, sexually active if so preoperatively, no additional procedures required
*Lost to follow-up

Disclosures
Funding: None **Clinical Trial:** No **Subjects:** NONE