

Two failed mid-urethral slings: And now what?

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BACKGROUND

There is no consensus regarding optimal management following failure of synthetic mid-urethral slings (MUS).^{1,2}

In patients with 2 or more failed MUS, the literature is even more scarce.¹

AIMS OF THE STUDY

To review our tertiary care center experience in management after 2 or more failed synthetic MUS.

MATERIALS AND METHODS

IRB approved, retrospective review of non-neurogenic, symptomatic females requiring re-operation after 2 or more failed synthetic MUS.

Database comprising:

- Patient demographics
- Presenting complaint
- Prior anti-incontinence, pelvic organ prolapse or genitourinary surgery
- MUS-related complications
- Other pelvic, urinary, pain or sexual symptoms
- Investigations performed/required after presentation
- Subsequent treatment (anticholinergics, repeat surgery, pelvic floor exercises)
- Outcomes of subsequent treatment and current clinical status
- Urogenital Distress Inventory-6 (UDI-6) questionnaire and visual analog scale quality of life question (VAS QoL).

Descriptive statistics were used to analyze outcomes.

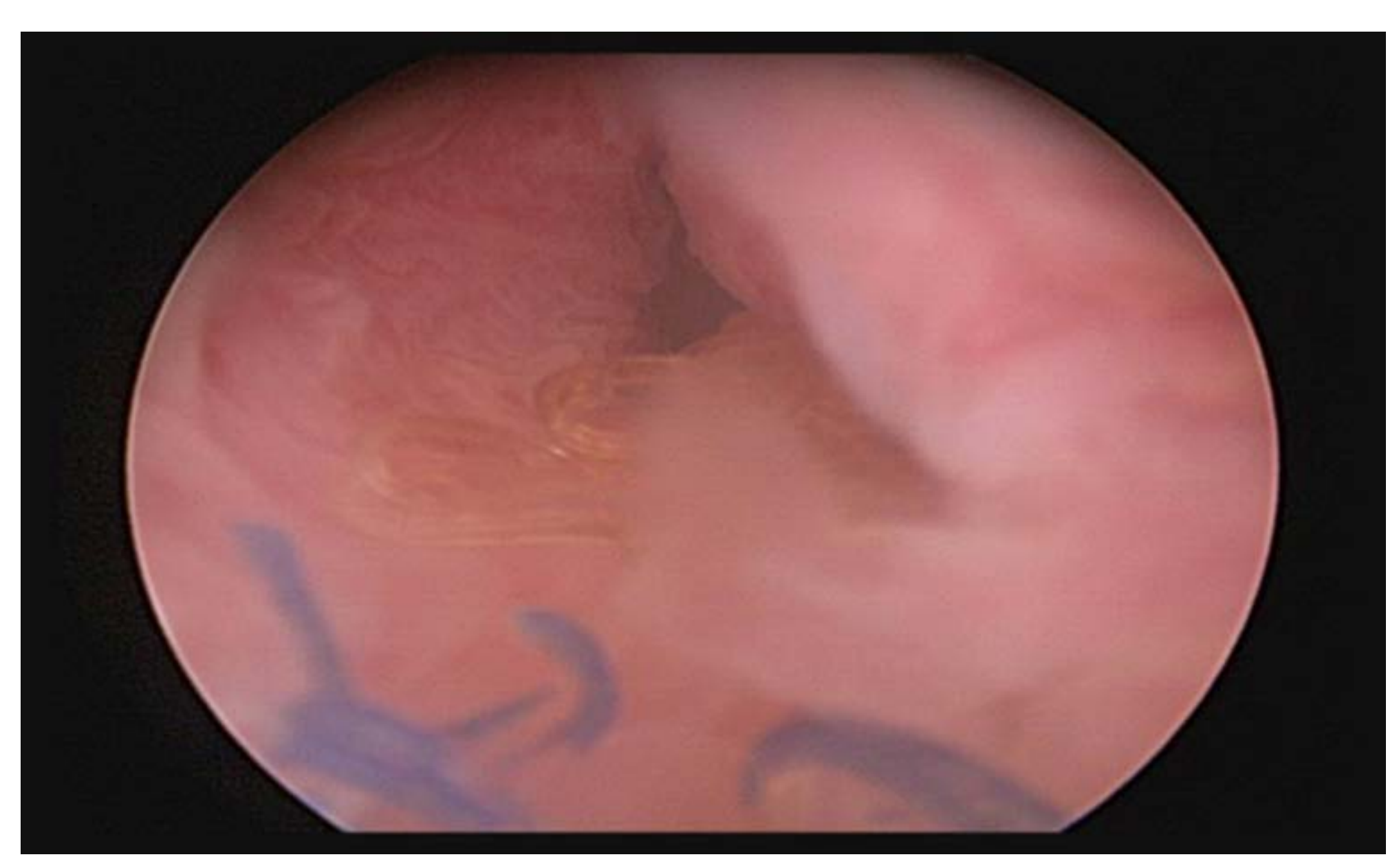


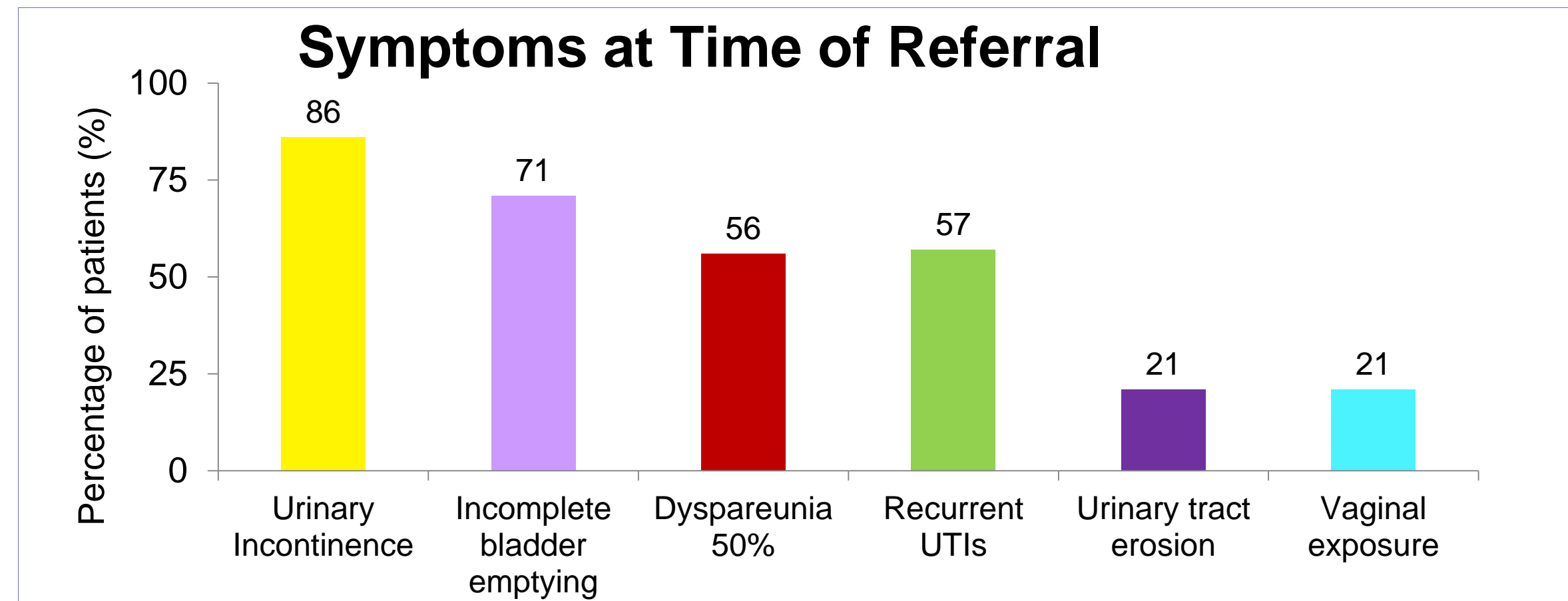
Figure 1. Cystoscopic view of 2 MUS visible in the urethral lumen. This patient required two endoscopic sessions with Holmium laser.

RESULTS

Patient Demographics

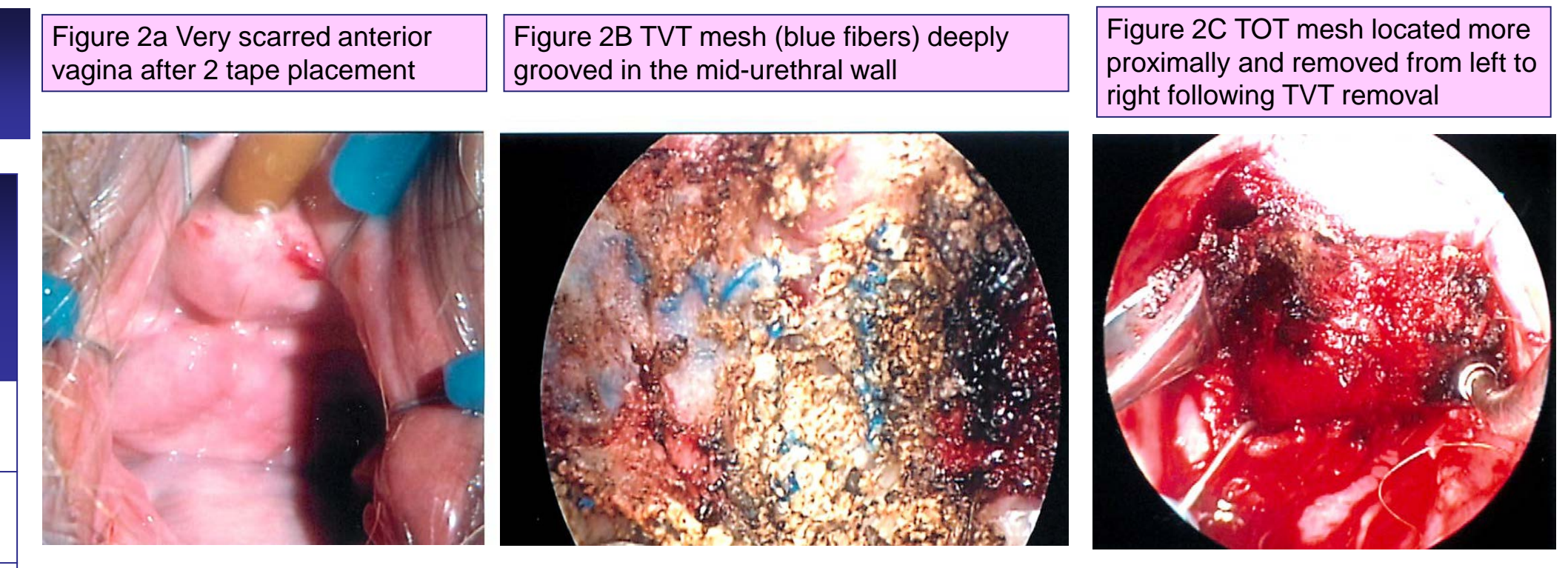
Recruitment period: 2007 to 2012

Number of patients	14
Age: mean (range)	55 (40-70)
BMI: mean (range)	30 (17-40)
Race: number (%)	
Caucasian	12 (86%)
Hispanic	2 (14%)
Referral Locale: number (%)	
Within state	12 (86%)
Out of state	2 (14%)
Parity: mean (range)	2 (0-4)
Prior hysterectomy: number (%)	12 (86%)
Prior POP repair: number (%)	8 (57%)
POP mesh: number (%)	4 (28.5%)
Prior anti-incontinence procedures (including repeat MUS): mean (range)	3 (2-6)
Time to referral from symptom onset: mean (range)	3.7 yrs (2m- 10yrs)
Prior MUS type: number (%)	
Retropubic (RP) +transobturator	10 (71%)
Mini-sling x 2	1 (7%)
RP x 2	1 (7%)
1 sling type unknown	2 (14%)
Number of investigations after referral: mean (range)	3.5 (1-6)
Follow-up (months): mean (range)	18.8 (1-56)
Lost to follow-up: number (%)	1 (7%)



Patient	Age	Chief complaint	# MUS	1 st type of SX after referral	Additional Treatment	Residual symptoms	F/u (m)
1	52	Mixed incontinence	2	MUS-R AVWS	Ach PFE	Cure	56
2	40	Dyspareunia	2	MUS-R	BA **PV Sling	No improv't	41
3	57	UTIs	2	MUS-R	AVWS **Augment cystoplasty	No improv't	25
4	2	Continuous Incontinence	2	VVF repair VMR +MUS-R	Hydrodistension PV Sling BA Ach	Partial	21
5	70	Mixed incontinence	2	BA	Augment cystoplasty	Cure	32
6	58	Urinary erosion	2	Holmium laser	Holmium laser x2	Partial	18
7	51	Dyspareunia	3	MUS-R		Partial	15
8	51	Dyspareunia	2	MUS-R	Ach PFE	Partial	16
9	64	Mixed incontinence	2	MUS-R		Partial	14
10	42	Mixed incontinence	2	MUS-R		Partial	12
11	55	Recurrent bladder calculi	2	RP removal of MUS arms		Partial	3
12	66	Continuous incontinence	2	UVF repair MUS-R	BA	Partial	6
13	68	Dyspareunia	2	MUS-R		Partial	1
14	46	Mesh infection	2	MUS-R PV sling		No improv't	3 LTF

Key for abbreviations: # MUS-number of mid-urethral slings, Sx- surgery, F/u (m)-follow-up (months), MUS-R- mid-urethral sling removal, AVWS- anterior vaginal wall suspension, Ach- anticholinergics, PFE- Pelvic floor exercises, BA- bulking agents, PV Sling- pubovaginal sling, **pending, Improv't-improvement, UTIs- urinary tract infections, VVF- vesicovaginal fistula, VMR- vaginal mesh removal for pelvic organ prolapse, RP- retropubic, UVF- urethrovesical fistula, LTF-Loss to follow-up, yrs- years



IMPRESSION OF RESULTS

There is a growing number of patients who have been treated with repeat synthetic MUS for persistent/recurrent SUI in the literature.

Despite this trend of repeat MUS placement and decreased success rates compared to primary MUS placement, there is very little reported regarding outcomes of those who fail 2 or more MUS.

A uniform evaluation and treatment strategy cannot be applied to these challenging patients as their presentations and clinical scenarios are variable.

Unlike the comparative ease of placing a 2nd MUS, the desired "quick" cure of being dry, pain-free, sexually active (if so preoperatively), and free from additional treatments should the 2nd MUS fail or have complications is not always feasible and is often ignored.

CONCLUSIONS

- **The evaluation & management of symptomatic women who have failed 2 or more synthetic MUS were complex with low permanent cure rate.**
- **Although repeat MUS can yield a satisfactory outcome after initial MUS failure, the consequences of failure of a subsequent MUS should be presented and thoroughly discussed.**
- **Outcomes of patients with ≥ 2 MUS failures need to be examined before repeat MUS placement becomes a widespread standard treatment for failed MUS.^{1,2}**

REFERENCES

[1] Hashim H, Terry T. Management of recurrent stress urinary incontinence and urinary retention following midurethral sling insertion. Ann R Coll Surg Engl. 2012;94:517-22.

[2] Bakali E, Buckley B, Hilton P, Tincello D. Treatment of recurrent stress urinary incontinence after failed minimally invasive synthetic suburethral tape surgery in women. Cochrane Database Syst Rev. 2013.