

## THE SURGICAL MANAGEMENT OF MESH-RELATED BLADDER OUTFLOW OBSTRUCTION, VAGINAL EXTRUSION, URETHRAL EROSION AND BLADDER EROSION FOLLOWING STRESS INCONTINENCE OR PROLAPSE SURGERY IN WOMEN

### Hypothesis / aims of study

The use of synthetic mesh for female stress urinary incontinence (SUI) or prolapse (POP) can result in disabling complications and should be managed in specialist centres. We report the outcomes of the surgical management of complications, other than pain, related to the use of synthetic mesh for female SUI or POP in our unit.

### Study design, materials and methods

We retrospectively reviewed our prospectively-acquired database of all women referred to our centre with complications other than pain related to transvaginal mesh (for POP or SUI). Data was collected on type of mesh surgery, type of complication, surgical management, and outcomes (in terms of cure of original complication and rate of persistent or recurrent SUI). No procedures were performed for pain only – all patients had proven extrusion, erosion or bladder outflow obstruction.

### Results

A total of 55 women with a mean age of 58 years (24-82 years) were referred with mesh-related complications. The commonest complication was urethral erosion in 19 (35%) patients, followed by BOO in 15 (27%), bladder erosion in 13 (24%) and vaginal extrusion in 11 (20%). The commonest presenting symptoms were voiding dysfunction, recurrent UTI/haematuria, recurrent or persistent SUI, and vaginal/urethral pain. Mesh excision resulted in cure of original complaint in all patients and recurrent/persistent SUI was subjectively cured in 92% with further surgery.

**Table 1.** Outcomes of surgical treatment for mesh-related complications

Complication	N	Treatment	Cure	Persistent or recurrent SUI	Treatments for SUI
Urethral erosion +/- urethrovaginal fistula	19	Vaginal tape incision	0/2*	0/2	
*both cured with tape excision		Vaginal tape excision + MFP	17/17	11/17	Bulking 1 RFS 4 Colposuspension 3 AUS 1 Ileal conduit 1
Bladder erosion	13	Endoscopic resection/laser	5/7**	4/7	
**both cured with open excision		Open excision	3/3	2/3	Colposuspension 1 RFS 1
		Open excision + RFS/Colposuspension	5/5	0/5	
Vaginal extrusion	11	Vaginal recovering of tape	0/3***	2/3	Bulkamid 1 RFS 1
***all 3 cured with tape excision		Vaginal tape excision	8/8	5/8	Colposuspension 3 RFS 1 Ileal conduit 1 (same patient as above)
Bladder outflow obstruction	15	Vaginal tape incision	3/6****	1/6	
****all 3 cured with tape excision		Vaginal tape excision	9/9	4/9	RFS 3 AUS 2

Some patients had more than one tape, more than one complication, or more than one procedure

### Interpretation of results

Open excision gives the highest cure rate in terms of resolution of eroded/extruded mesh. Bladder erosion can be successfully managed endoscopically in some women and should be attempted prior to open excision. Urethral erosion was most successfully managed with open excision and Martius fat pad interposition. Persistent or recurrent SUI occurs in approximately 65% of women overall and can be successfully managed with rectus fascial sling or colposuspension in the majority.

### Concluding message

Complications related to the use of synthetic mesh for SUI or POP surgery can be debilitating and life-changing. Surgical treatment should be individualised but open mesh excision results in cure of presenting symptoms in the majority of patients treated in specialist centres. However, patients should be warned that they may require multiple procedures in order to achieve their desired outcome.

Disclosures

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**Informed Consent:** Yes