

MANAGEMENT OF SYNTHETIC MESH URINARY TRACT COMPLICATIONS

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AIM
Complications associated with mesh for treatment of pelvic organ prolapse (POP) and stress urinary incontinence (SUI) are well recognised. A number of these require surgical management for perforation into the urinary tract (UT). With limited published data regarding management of these, this project reviews management of mesh related UT injury within our service.

Study Design

A retrospective cohort study of prospectively collected data between 2018-2023 was carried out. Patients were identified from unit databases All data was collected from electronic notes including demographics, implant, site of perforation, management and outcomes. Partial removals in this series imply complete removal of vaginal portions of the mesh and total removal where the entire implant was removed.

Results

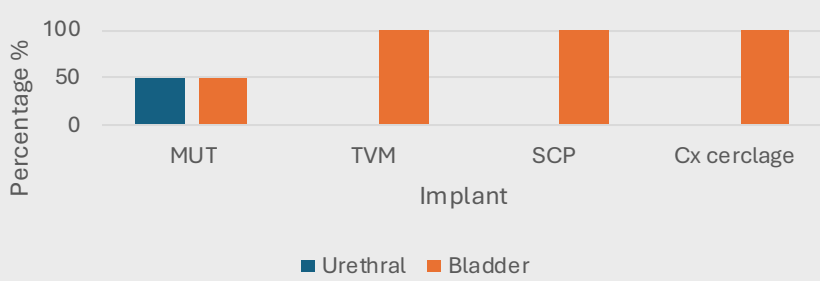
25 patients were identified with UT mesh perforation during cystourethroscopy.

Demographic details:

- Mean age 9 (range 39-82)
- Mean BMI 27 (range 18-34)
- Main symptoms: Recurrent UTI (48%); Pain (32%); Incontinence (32%); Voiding Dysfunction (12%).
- Tapes: Mid-urethral Sling MUS (80%); Transvaginal mesh TVM (8%); Sacrocolpopexy mesh SCP (4%); Cervical (Cx) Cerclage (4%)
- Single implant (84%) vs. multiple implants (16%).

12% declined further treatment and received treatment for recurrent UTI with antibiotics and vaginal oestrogen. 71% have undergone surgical treatment – 47% minimal access (laser) and the remainder with partial or total surgical revision. The remainder had not yet undergone planned surgical management at the time of data collection. Of patients undergoing laser therapy, 63% required further laser treatment or definitive surgery, 25% were satisfied with outcome compared with 100% partial removals and 100% total removals.

Site of Perforation by Implant Type



	Laser		Partial		Total	
	Previous revision	No previous revision	Previous Revision	No previous revision	Previous revision	No previous revision
MUT	0	8	1	2	3	3
TVM	0	0	0	0	0	0
SCP	0	0	0	0	0	0
Total	8		3		6	
% requiring further treatment	5		0		0	

Interpretation of Results

Patients who had laser treatment were more likely to require further surgery than those undergoing formal surgical excision. More patients with RP tapes opted for total removal, but numbers of patients were smaller so this needs cautious interpretation.

Previous surgery did not appear to be influencing procedure choice, however, did seem to make patients less likely to opt for no treatment. Age was an influencing factor.

Conclusion

Laser is less invasive however offers higher re-operation rates with poorer satisfaction rates than excision surgery. Patients must be counselled accordingly.