

RESULTS OF SALVAGE SURGERY AFTER COMPLICATIONS OF MESH SLING AND PROLAPSE REPAIRS USING A VALIDATED OUTCOME SCORE

Hypothesis / aims of study

Patients with mesh complication usually have multiple complaints, yet reports of treatment outcomes describe success or failure without respect to the particulars of each symptom. We report multivariate outcomes after salvage surgical treatment of mesh complications in women using a validated outcome measure.

Study design, materials and methods

This is a retrospective study of consecutive women who had salvage surgery after failing initial treatment of a mesh sling complication. Pre-operative evaluation included history & physical exam, validated questionnaires, voiding diary, uroflow, post-void residual, pad test, cystourethroscopy and videourodynamic study. Treatment was individualized to respective complications. Post-operatively, outcomes were assessed with the Patient Global Impression of Improvement (PGII) for each symptom with success classified as a PGII of 1, improvement as 2-3, and fail as 4-7. Results are shown in Table 1.

Results

48 women, aged 37 - 79 years (mean=60) underwent surgery to treat complications from mesh sling and/or prolapse repair. They had previously undergone 0 – 3 (median 1.4) prior unsuccessful surgeries to treat the complications. The original sling composition was Type 1 mesh in 37 patients and Types 2 and 3 in 11. All patients had more than one symptom which are listed in the table along with the results of surgery based on the PGII. Surgical procedures used to correct primary failure included sling incision, partial or complete sling excision, urethrolisis, urethral reconstruction, partial cystectomy, ureteroneocystotomy, cystectomy & urinary diversion, and enterocystoplasty. Median follow-up was 1.7 years (range .5 - 9). Overall, a success/improve outcome was achieved in 38/48 (79%) of patients after a single operation. Reasons for failure were multiple for each patient and included refractory pain (8), mesh extrusion (8), OAB (7), mixed incontinence (2) and recurrent fistula (1). Of the 11 initial failures, 7 patients subsequently underwent 12 subsequent procedures and success/improve was achieved in 5 (67%) after continent urinary diversion (1), continent urinary diversion & cystectomy (1), partial cystectomy & augmentation cystoplasty (1), biologic sling (2) & sinus tract excision (1) and vaginal mesh excision (1). Success was ultimately achieved in 41 /48 patients (85%).

Table 1: Initial Mesh Sling Complications*

Initial Mesh Complication (n)	PGII		
	Success (%)	Improve (%)	Fail (%)
OAB (30)	5 (16%)	17 (57%)	8 (27%)
SUI (24)	10 (42%)	9 (37%)	5 (21%)
Fistula (14)	13 (93%)	0 (0%)	1 (7%)
Vaginal extrusion (12)	4 (33%)	0 (0%)	8 (67%)
Discharge/hematuria (6)	3 (50%)	2 (33%)	1 (17%)
Bladder/urethral erosion (8)	8 (100%)	0 (0%)	0 (0%)
Urethral obstruction (7)	6 (86%)	1 (14%)	0 (0%)
Pelvic Pain (13)	3 (23%)	4 (31%)	6 (46%)

* numbers greater than 100% because patients often had more than one presenting symptom; the same patient may have a success in one category and an improvement or failure in another

Interpretation of results

Success after salvage surgeries for mesh sling complications is contingent on initial complaint and on how success is defined. New OAB symptoms and pelvic pain after mesh surgery were the most difficult to cure after salvage surgery. Mechanical problems such as fistulas, bladder and urethral erosions and urethral obstruction had the highest success rates with salvage surgery. Herein, we also demonstrate that a validated patient-reported outcome (PRO) instrument, the PGII, is useful in determining which of several mesh-related complications improve with remedial surgical procedures, and to what extent such improvement is reported by patients.

Concluding message

Most women with mesh complications have multiple symptoms which should be assessed separately. Success after initial failure to repair mesh sling complications is possible in the majority of patients, however, multiple surgeries may be required. Pelvic pain and overactive bladder symptoms are more difficult to cure with salvage therapy.

Disclosures

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