

SURGICAL INTERVENTIONS FOR THE COMPLICATIONS FROM SYNTHETIC MESH AFTER MIDURETHRAL SLING SURGERY

Hypothesis / aims of study

Female stress urinary incontinence is highly prevalent, and synthetic midurethral sling procedure is the most common type of anti-incontinence surgery. After the synthetic midurethral sling procedure, however, recognized complications include urinary storage and voiding symptoms, urethral, bladder and vaginal extrusion¹ and the reported incidence of complications ranges from 1.9 to 44%². The purpose of this study was to describe the evaluation and management of complications from synthetic mesh after surgery for stress urinary incontinence.

Study design, materials and methods

From March 2012 to March 2017, we retrospectively reviewed and analyzed the medical records of all patients who were referred to a tertiary referral centre for lower urinary tract symptoms and were diagnosed and underwent surgical intervention to manage the mesh-related complications after mid-urethral sling surgery.

Results

A total 25 patients were diagnosed to mesh-related complications after midurethral sling surgery and underwent surgical managements. The complaints at evaluation were recurrent cystitis (n=11, 44%), vaginal bloody spotting (n=8, 32%), groin pain (n=4, 16%) and voiding dysfunction (n=2, 8%). All of the patients in this study, 12 patients (48%) had mesh perforations into the vagina, 4 patients (16%) into the bladder, 3 patients (12%) into the urethra and 2 patients (8%) had thigh abscess. The mean time from midurethral sling surgery to first examination at a tertiary referral site was 5.8 ± 2.8 years (range, 0.5-10 years). The most surgical intervention for treatment of their complication was the complete removal of the mesh by vaginal approach (n=20, 80%) (Table 1). After surgical intervention, the symptoms related mesh perforations and infection were complete cured (n=21, 84%). However, groin pain and voiding dysfunction were persist after mesh removal (n=4, 16%).

Interpretation of results

These results suggest that mesh-related complications that are referred to tertiary centre are various and severe enough to require surgical intervention. Patients diagnosed with mesh-related complications may be offered surgical treatment with total or near total mesh removal in order to allow complete resolution. Patients diagnosed with mesh perforation into vagina, bladder or urethra may be cured in a single operation. On the other hand, even if the mesh were removed, voiding dysfunction or groin pain after midurethral sling surgery may persist.

Concluding message

These results suggest that mesh-related complications that are referred to tertiary centre are various and severe enough to require surgical intervention. This information is helpful in decision-making for surgical procedures to manage mesh complications.

Table 1. Surgical procedures to manage mesh complications

Variables	Procedures		
	Complete removal of the mesh by vaginal approach, n	Endoscopic excision, n	Complete removal of the mesh by vaginal and thigh approach, n
Vaginal perforation	12		
Bladder perforation	1	3	
Urethral perforation	3		
Voiding dysfunction	2		
Thigh abscess			2
Groin pain	2		

References

1. Deval B, Haab F. Management of the complications of the synthetic slings. *Curr Opin Urol* 2006;16:240-3
2. Ashok K, Petri E. Failures and complications in pelvic floor surgery. *World J Urol.* 2012;30:487-94

Disclosures

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