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## MANAGEMENT OF SIGNIFICANT COMPLICATIONS FOLLOWING SYNTHETIC POLYPROPYLENE (PROLENE) MESH SLINGS IN A REFERRAL SETTING

### Aims of Study

Mid-urethral prolene synthetic slings have gained popularity for the management of stress urinary incontinence. The true incidence and morbidity of complications from these procedures remains to be defined. We present our referral experience managing significant complications from prolene mesh slings.

### Methods

Patients referred with prolene synthetic sling complications were reviewed. The diagnosis and treatment outcomes for patients requiring operative intervention were evaluated.

### Results

During a two-year period, 7 patients referred for prolene synthetic sling complications have required operative intervention. Precipitating procedures included: (2) mid-urethral prolene slings, (4) transvaginal tape procedures (TVT), and (1) percutaneous antegrade prolene mesh sling (SPARC).

Complications included: (1) patient with intravesical calcified prolene mesh (Fig 1) and bladder outlet obstruction (BOO) requiring urethrolisis and partial cystectomy, (1) patient with intravesical prolene mesh requiring partial cystectomy, (1) patient with small bowel injury and cystotomy requiring small bowel resection and cystotomy closure, (1) urethral erosion requiring transvaginal prolene mesh removal, urethral reconstruction, and Martius labial fat pad graft (MLFPG), (1) BOO with urinary retention managed by circumferential urethrolisis and MLFPG, (1) BOO with cystocele managed by urethrolisis and Cadaveric Prolapse repair with transvaginal Sling (CaPS procedure), and (1) patient with persistent vaginal pain requiring prolene mesh removal.

Fig 1. Intravesical Calcified Prolene Mesh



With a mean f/u 6 months (range 3-14 months) 57% (4/7) of patients undergoing procedures to correct complications from prolene mesh slings have developed recurrent stress incontinence. Two patients were treated surgically for recurrent stress incontinence and two are currently undergoing biofeedback. Surgical management for recurrent stress incontinence included: one autologous fascia lata sling, and one CaPS procedure. Both patients are dry at 5 and 6 months f/u respectively. Two patients have developed de novo urgency managed with antimuscarinics and biofeedback.

All 3 patients with bladder outlet obstruction had symptomatic and urodynamic resolution of obstruction following urethrolisis. The patient with persistent vaginal pain following prolene mesh sling had resolution of pain and recurrent stress incontinence following sling removal. She is currently undergoing biofeedback.

**Conclusions**

The true incidence of complications from prolene mesh slings remains to be defined. Delayed obstruction, as well as morbidity from unrecognized bladder, bowel, and urethral injury may be significant. Secondary and tertiary operative and non-operative intervention may be required.