

PRESENTATION AND MANAGEMENT OF IATROGENIC FOREIGN BODIES OF THE LOWER URINARY TRACT FOLLOWING PELVIC SURGERY

Hypothesis / aims of study

The surgical use of mesh technologies for pelvic surgery may increase the risk of mesh complications. These complications present challenges for identification and treatment. We review presentation, management and outcomes for a series of iatrogenic foreign bodies of the female lower urinary tract.

Study design, materials and methods

Retrospective review of records of 45 patients with mesh complications following pelvic surgery between 11/2000 and 11/2008 were evaluated for demographics, presenting symptoms, prior procedures, type of foreign body, technique and outcomes.

Results

Mean patient age was 55.23±13.5 years. 45 patients (22 extrusions, 23 erosions) were treated. 33 (73.3%) were symptomatic within 2 months (0-123) of surgery. 31 (68.9%) had prior pelvic surgery. Extrusion presented commonly with dyspareunia, incontinence, or vaginal discharge/ bleeding. All extrusions improved with excision, except one (0.45%) which required second excision and 2 (0.9%) with persistent obturator pain requiring orthopedic exposure and removal of mesh. Most common source procedure for erosion were 12 (52.2%) mid-urethral slings and 6 (26%) prolapse repairs. Foreign bodies included polypropylene in 14, xenograft in 2, goretex in 2, protegen in 3 and one case of retained suture. Erosions commonly presented with incontinence, frequency, urgency or persistent UTI. 9 (39.1%) patients had previous trials of removal (4 endoscopic, 4 transvaginal). Location of the foreign body was urethra in 9 patients (39.1%), bladder neck in 7 patients (30.4%) and bladder walls or dome in 6 patients (26.11%). All erosions were evident cystoscopically. Except for one endoscopic removal, all erosions were managed surgically-cystorraphy or partial cystectomy (11), urethroplasty (9± interposition graft), abdominal fistula repair and conduit in 1 patient each. Only 13% were reported to have clinical success (3) or improvement (3), yet 19 (82.5%) felt their symptoms were cured or partially improved. 1 patient developed de novo urgency. 8 of 23 (34.8%) patients had a secondary procedure, with 50% requiring a third procedure.

Interpretation of results

Multiple prior repairs and a high re-operation rate support a complex patient population best managed with non-endoscopic repair.

Concluding message

This is the largest series to date of patients with iatrogenic foreign body erosions of the bladder and urethra. Although a small number had complete subjective symptom regression, a majority were subjectively improved but with some level of persistent symptoms.

<i>Specify source of funding or grant</i>	none
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Vanderbilt University IRB
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes