



A case of mesh erosion in the ureter eight years after a tension-free vaginal mesh surgery

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Introduction

Tension-free vaginal mesh (TVM) surgery is an effective treatment for pelvic organ prolapse, but carries some complications, including mesh erosion. We report a rare case of mesh erosion to the ureter 8 years after TVM surgery.

Case

A 77-year-old, multiparous female presented with history of transvaginal hysterectomy with uterine prolapse at the age of 59. At the age of 70, she underwent TVM surgery with Prolift mesh for a cystocele. She was asymptomatic, but 5 years later, she underwent a CT scan because of an edematous change in the right ureteral orifice with a cystoscope performed for follow-up. It showed calculus in the right lower ureter (Fig. 1). The stone increased and surgery was recommended, which the patient refused.

Eight years after the surgery, the calculus had increased and her hydronephrosis had progressed (Fig. 2). Therefore, transurethral ureterolithotripsy was performed. Shortly after laser therapy was started, the mesh detained by previous TVM was exposed. We removed the stones and exposed mesh as much as possible using the laser (Fig. 3). Originally, we planned to perform a new bladder and ureteral anastomosis, but she refused open surgery. The follow-up period is 2 years and she has not yet recurred.

Discussion

The mesh erosion rate is estimated to 1–19% [1, 2]. The most frequently exposed part is the vaginal wall [3]. There are hardly any reports describing mesh erosion to the ureter. The risk factor for erosion was a large mesh. To prevent mesh erosion, selecting a small mesh size is suggested [3].

Late complications after TVM surgery are rare, but serious; therefore, we follow up every 3 months for 1 year after surgery with internal examination, urinalysis, cystoscope, and renal echo. Follow-up at least 1 year after surgery is recommended, and we recommend follow-up once a year up to 5 years after surgery.

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Fig. 1 Computed tomography image of the right ureter stone 5 years after TVM surgery. The stone is shown enclosed in a circle



Fig. 2 Computed tomography image of the right ureter stone 8 years after TVM surgery. The stone is shown enclosed in a circle

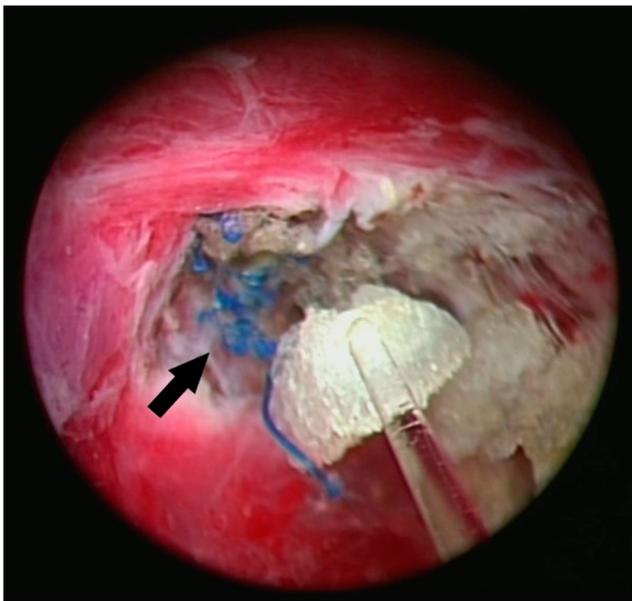


Fig. 3 Cystoscopic appearance of the ureterovesical junction. Upon visualization of exposed mesh and stones, both were removed by laser fiber (200 μ). The mesh is indicated by an arrow

Compliance with ethical standards

Conflicts of interest None.

Consent Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

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