

Lithified transobturator tape mesh in the bladder: Case report

Mesane taşlaşmış transobturator bant meşi: Olgu sunumu

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Abstract

Transobturator tape (TOT) technique is one of the most commonly used techniques in Stress Urinary Incontinence (SUI) treatment. The most common complications of this technique in the long term are pain and dyspareunia. Bladder perforation is not a common complication of the TOT technique but, regardless, it is a catastrophic complication, therefore, routine cystoscopy should be done in this technique. In this report, we present a woman who presented with severe groin pain and was diagnosed with lithified sling material in her bladder. The patient was managed with open cystolithotomy and mesh excision.

Keywords: Midurethral slings, stress urinary incontinence, tension-free vaginal tape, trans-obturator tape, bladder.

Öz

Transobturator bant (TOB) tekniği, Stres Üriner İnkontinans (SÜİ) tedavisinde en sık uygulanan tekniklerden birisidir. Bu tekniğin uzun dönemde en sık görülen komplikasyonları ağrı ve dispareniadır. Mesane perforasyonu, TOB yönteminde sık karşılaşılan bir komplikasyon değildir, ancak olduğu zaman katastrofik bir komplikasyondur. Bu nedenle bu teknikte rutin sistoskopi yapılmalıdır. Bu yazıda, şiddetli kasık ağrısı olan ve mesanesinde taşlaşmış askı materyali saptanan bir kadın hasta sunuldu. Hasta, açık sistolitotomi ve meş eksizyonu ile tedavi edildi.

Anahtar Sözcükler: Midüretal askı, stres üriner inkontinans, gerilimsiz vajinal bant, transobturator bant, mesane.

Introduction

Stress urinary incontinence (SUI) is a common and distressing condition (1) and may not be adequately treated with conservative techniques such as pelvic floor exercises and behavioural therapy (2,3). Surgical treatment is recommended for women who do not benefit from conservative treatment and it seems to be an alternative to physiotherapy (4).

After complications related to retropubic tension-free vaginal tape (TVT), another minimally invasive technique, transobturator tape (TOT) was developed in 2001 (5). Transobturator technique has the potential to reduce serious complications encountered with retropubic technique. However, transobturator technique may also cause major complications such as bladder perforation.

We present a case that we performed an open cystolithotomy operation, due to forgotten mesh material resulted in lithiasis in the bladder.

Case Report

A 54-years-old female patient admitted to our department with the complaint of dysuria, severe pain in the groin area while walking, and frequent urinary tract infections. During physical examination suprapubic tenderness was detected and there was no cystocele and rectocele. Ultrasound imaging showed foreign body and stones in the bladder. Her medical history revealed no additional illness and she went through menopause 9 years ago. Laboratory examinations were as follows: creatinine: 1.08 mg/dL, K: 4.8 mmol/L and Hb: 9.8 g/dL. Her surgical history revealed laparoscopic ligamentopexy in 1997 and TOT in 2013.

In 2014, the patient was admitted to the hospital with a complaint of lack of urination more than 24 hours and then a Foley catheter was introduced to the patient because of glob vesical. Mesh cut was decided due to recurrent urinary retention after Foley catheter was removed. Previously located mesh was cut via entering the left paraurethral area, in the lithotomy position. The inferior urethra was released. The vagina anterior wall was closed and 1 cm pocket on the right side wall of the vagina was repaired primarily.

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We planned open cystolithotomy and mesh excision upon patient's complaints and detected foreign body and stones in her bladder. A written consent form was taken from the patient. Under general anesthesia, a 16 Fr Foley catheter was introduced and bladder was inflated with 200 ml sterile isotonic. A median inferior incision was made, the layers were passed and the bladder was reached. The bladder was incised and entered. Approximately 25x10 mm sized lithified mesh materials were encountered in 1 cm anterolateral of both ureter orifices, bilaterally. The lithified mesh materials were excised with sharp and blunt dissections (Figure-1). Then, the mesh entry sites and bladder were closed with double-layer by using 2/0 rapid vicryl suture. A Jackson-Pratt drain was placed near the bladder and the procedure was terminated by closing the layers.

No complications were observed during the perioperative and postoperative period. The drain was removed on the second postoperative day and patient was discharged on the third day. Foley catheter was taken on the postoperative seventh day after cystography was performed and verifying that there is no urine extravasation from the bladder.

Written informed consent was obtained from the patient for publishing the individual medical records.



Figure-1. Excised lithified mesh materials.

Discussion

Mid-urethral slings are the most commonly used method in the treatment of SUI in women today. They can be applied with transobturator or retropubic technique. Although the complication rates of the sling surgeries are not mentioned sufficiently, de novo lower urinary system symptoms, pain, dyspareunia and sling erosion may occur. On the other hand, Ku et

al. analyzed the postoperative complications of the sling procedures and suggested that the rate of postoperative urinary retention and persistent urgency did not increase (6). Mellier et al. (7) compared transobturator and retropubic sling complication rates and showed that bladder injury rate was 10% in the retropubic route while there was no injury in the transobturator route. An endoscopic method may also be preferred for excision of the calcified sling, instead of open surgery. Osorio et al. successfully performed pneumatic lithotripsy and cystoscopic resection for the treatment of a calcified sling (8). European Association of Urology (EAU) panel meta-analysis compared retropubic and transobturator mid-urethral slings in 34 randomized controlled trials (5786 women). The 12-month cure rates were similar (77% and 85%, respectively) (9). Voiding dysfunction (4% vs. 7%), bladder perforation (0.3%) and urethral perforation (5%) risk were less common in the transobturator route than in the retropubic route. Chronic perineal or inguinal pain was more common in the transobturator route (7%) than in the retropubic route (3%). In TOT surgery, there must be sufficient experience to prevent bladder perforation. If perforation occurs during the case, immediate cystoscopy should be performed to correct the misplaced sling material (10). In our case, the patient had severe groin pain when applied to our department. Previously, she had urinary retention, thereupon, her mesh was cut, but we do not know whether urethrocystoscopy was done in that period. In the past, the EAU guidelines recommended urethrocystoscopy only in the retropubic technique, but the recent guidelines (2017) recommend urethrocystoscopy as a part of the procedure in both techniques.

Although sling operations are frequently used techniques in the treatment of SUI, their complications may be debilitating. Clinicians should not hesitate to make cystoscopy, a simple and non-invasive diagnostic tool, when they are suspicious, thus protecting patients from subsequent catastrophic complications. If a mesh is detected in the bladder, it should be immediately removed and the duration of the bladder catheterization should be extended.

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