ORIGINAL RESEARCH PAPER

Urology

KEY WORDS:

SLING EROSION AFTER TVT-EXACT PROCEDURE: CASE REPORT

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INTRODUCTION

The tension-free vaginal tape (TVT) is a common procedure for the treatment of stress urinary incontinence. This minimally invasive treatment approach might be accompanied by both intraoperative and postoperative complications. One of them, intravesical mesh erosion is low incidence but usually raise delayed complication. The most common symptoms of this complication are suprapubic pain, haematuria, dysuria, recurrent cystitis [1]. Cystoscopy on this cases is the method of choice for diagnosis mesh erosion [1]. Management of intravesical mesh erosion is still controversial [2] and risk of repeated surgery with concomitant erosion diagnosis is really high. In point of fact, endoscopic, transvaginal or abdominal (open or laparoscopic) approaches can be used to remove eroded mesh. Recently, robotic transvesical removal of an eroded mesh has been reported [2] but efficacy of this method is not obvious. According to Lo TS and al. ultrasonography can be an effective tool in evaluating mesh morphology and detecting intravesical mesh erosion [5]. We report a case of complicated intravesical mesh erosion with adhered stone, which was successfully performed using endoscopic management procedure.

CASE REPORT

A 49-year-old female patient was referred with recurrent stress urinary incontinence. Pre-operative assessment proved intrinsic sphincter deficiency. The TVT-Exact procedure (Ethicon Women's Health, Somerville, NJ, USA) was performed according to the original technique described by Ulmsten and Petros. This procedure was uneventful with minimal blood loss. After the procedure the patient received vaginal packing for 4 hours. Foley catheter was removed on the next day after procedure. On the following two days of hospitalization patient with wellbeing has been discharged to home.

After two years passed, the patient visited urologist for routine check. Objectively we observed unimportant possibly residual chronic urinary tract infection symptoms and complain of pain in the left lower abdominal region. No pathological findings were founded during gynaeco-diagnostic laparoscopy. Urinary tract ultrasound and bacteriological urine test also showed no structural pathology or signs of acute bacterial infection. During the cystoscopy, we founded classical picture of the TVT sling erosion **(Fig. 1**) and on the part of the sling inside the bladder formed urinary tract stones **(Fig. 2)**. Our decision was to perform navigating bipolar transurethral resection (TUR) procedure for intravesical mesh excision. Thereby the TUR stones and part of mesh also were resected and removed (**Figure 3).**

DISCUSSION

Intravesical mesh erosion can seriously complicate sling procedure. In our opinion endoscopic bipolar resection management can be effective and useful treatment approach for mesh and stone removal but a regular follow-up is essential, because complications may arise several years later. We also agree with point that further observation and perforce treatment is necessary on purpose of low morbidity and minimal invasiveness [4].

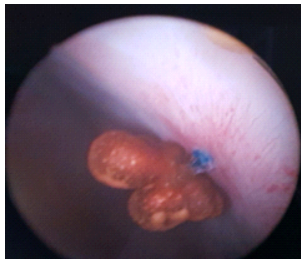

Figure 1. Cystoscopic view of intravesical TVT sling erosion.

Figure 2. Urinary tract stone on the mesh.

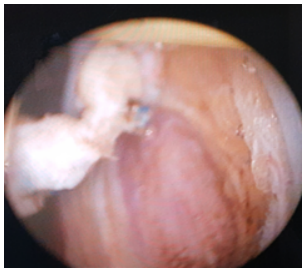

Figure 3. View after sling resection procedure.

References

1. Campobasso, D., Cerasi, D., Fornia, S., et al. Endoscopic holmium laser management of tension-free vaginal tape eroded into the bladder. International urology and nephrology, 2014, 46.8: 1507-1510.
2. Macedo, F. I. B., O'connor, J., Mittal, V. K., et al. Robotic removal of eroded vaginal mesh into the bladder. International Journal of Urology, 2013, 20.11: 1144-1146.
3. Kristensen I, Eldoma M, Williamson T, Wood S, Mainprize T, Ross S (2010) Complications of the tension-free vaginal tape procedure for stress urinary incontinence. Int Urogynecol J 21:1353–1357.
4. Novara G, Ficarra V, Boscolo-Berto R, Secco S, Cavalleri S, Artibani W (2007) Tension-free midurethral slings in the treatment of female stress urinary incontinence: a systematic review and meta-analysis of randomized controlled trials of effectiveness. Eur Urol 52:663–679.
5. Lo TS, Pue LB, Tan YL, Khanuengkitkong S, Dass AK (2014). Delayed intravesical mesh erosion in a midurethral sling following further mesh-augmented pelvic prolapse surgery. J Obstet Gynaecol Res. 40(3):862-4.