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Intravesical invasion of a Mersilene tape and secondary stone formation

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Introduction

In patients in the early stages of cervical cancer, the preservation of fertility is achieved through the removal of the entire cervix followed by laparoscopic abdominal cerclage (LAC) [1]. This procedure yields promising results, despite rare reports of Mersilene tape complications. The authors present a case of a 31-year-old woman with intravesical migration of Mersilene tape and bladder stone formation following LAC.

Case report

A 31-year-old woman underwent laparoscopic pelvic lymphadenectomy, radical trachelectomy, and LAC using Mersilene tape in 2014. In 2018, she presented with complaints of urinary frequency and abdominal discomfort lasting 4 weeks. Urinalysis showed leukocyturia and hematuria. A pelvic CT scan was obtained (Fig. 1). Cystoscopy revealed a knot in the bladder with calculus formation.

The patient immediately underwent cystoscopy. During the procedure, the white knot was observed in the trigone of the bladder. The ends of the Mersilene tape were found penetrating the bladder wall, alongside a superiorly located 1.5 * 1.5 cm calculus (Fig. 2). Holmium laser lithotripsy was utilized to remove the stone (Fig. 3a). A resectoscope was employed to resect the tape and bladder wall (Fig. 3b). The tape was removed from the bladder using endoscopic forceps (Figs. 3c and 4). A urethral catheter was retained for 1 month, after which no urinary symptoms remained.

Discussion

The complications of LAC are infrequent, but tension-free vaginal tape (TVT) erosions have been reported. Unlike LAC, post-TVT patients often suffer from recurrent cystitis or refractory urinary incontinence within 1 year [2]. The presented case informs of possible bladder erosion in patients experiencing persistent lower urinary tract symptoms following LAC. Vigilance with regard to a vesicovaginal fistula [3] is also advisable.

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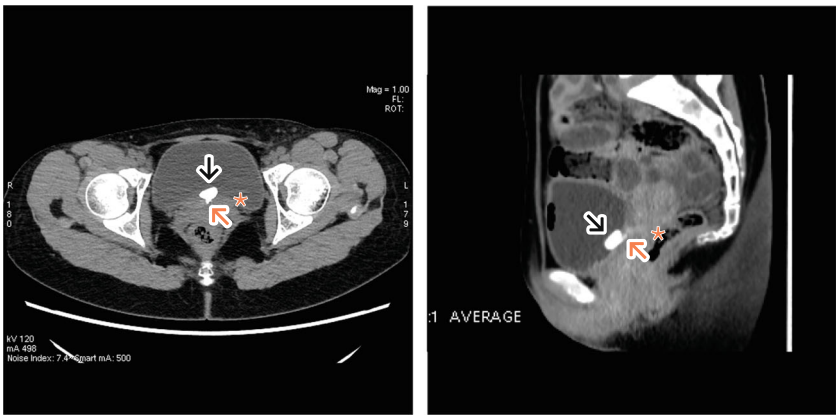

Fig. 1 **a** Lower abdomen and pelvic CT (transverse section) showed the stone formation (*black arrow*) and the end of the tape penetrated through the bladder wall (*yellow arrow with asterisk*). **b** Lower abdomen and pelvic CT (sagittal section)

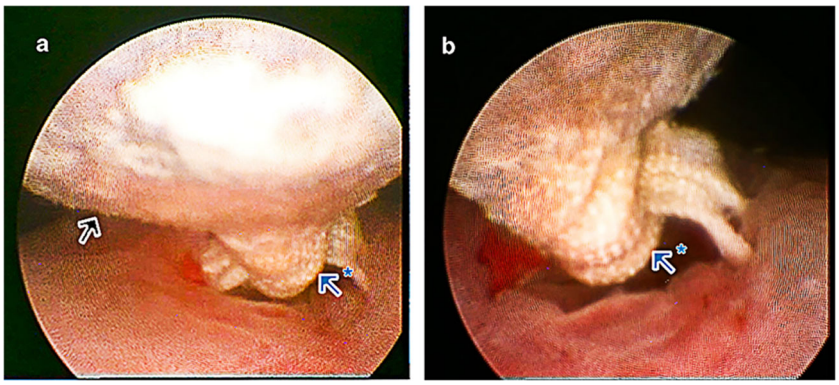

Fig. 2 **a** Cystoscopy revealed the knot of the Mersilene tape presented in the trigone of the bladder (*blue arrow with asterisk*), with the stone located superiorly (*black arrow*). **b** The ends of the tape penetrated through the posterior bladder wall (*blue arrow with asterisk* indicates the knot)

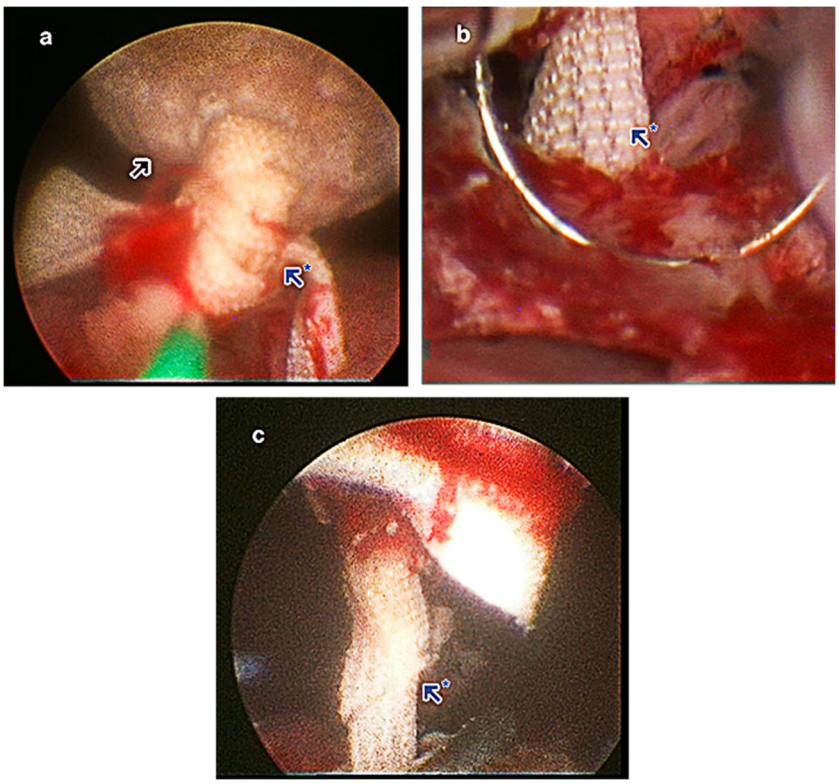

Fig. 3 Operative techniques. **a** The stone was removed by holmium laser lithotripsy. **b** The adhesions between the wall of the bladder and the tape were resected. **c** After the cut-off of the adhesions, the tape was removed by endoscopic forceps. *Black arrow* indicates the stone. *Blue arrow with asterisk* refers to the Mersilene tape

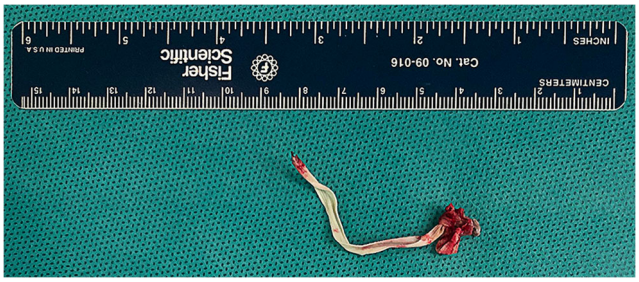

Fig. 4 Appearance of the migrated Mersilene tape after removal by cystoscopy

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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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