

Functional medicine

Incarcerated prolapsed ureterocele after midurethral sling in women

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ABSTRACT

Stress urinary incontinence (SUI) is a common problem in women. Successful treatment is now mid urethral sling but it would be a cause of urethral obstruction. In this case report, a 50 years old woman presented with a huge introitus mass after 3 months of midurethral sling. The mass protruded from the urethra and could not be reduced. Emergency MRI of pelvis was demonstrated prolapsed ureterocele, single system of right ureter. Preoperative planning was cystoscopy and mass excision. The patient was preoperatively counseled that right ureteric reimplantation may be required. Finally, the mass could be excised externally without reimplantation.

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Introduction

Stress urinary incontinence (SUI) usually presents in aging women and popularly treated by synthetic midurethral sling. Etiology of SUI is clearly known as urethral hypermobility due to weakness of pelvic floor muscles and ligaments and intrinsic sphincter deficiency related to urethral muscle weakness and nerve dysfunction.¹ Incomplete closing of urethral lumen due to a mass such as ureterocele can be a cause of SUI but it is rarely seen in aging women. Therefore, I would like to report an interesting case which is related to unrecognized prolapsed ureterocele.

Case presentation

A 50 years old woman, well controlled hypertension, presented with a huge introitus mass with contact bleeding for 1 day. Her symptom started 4 years ago, she occasionally felt a small mass protruded from her urethra during voiding and also complained mild SUI. She had been treated with pelvic floor exercise but her symptoms were a little improve. She decided to perform midurethral sling 3 months before this occurrence. On the medical record, the operation did not showed any abnormalities by physical examination and the procedure was performed without complications. After the operation, she was doing well and continence for 3 months. After that time, she found a 1 cm. mass protruding from her vagina and it was growing. She



Fig. 1. On physical examination, the huge introitus mass, 10 × 10 cm. in size, dark red in color was demonstrated. Urethral catheter was placed above the mass.

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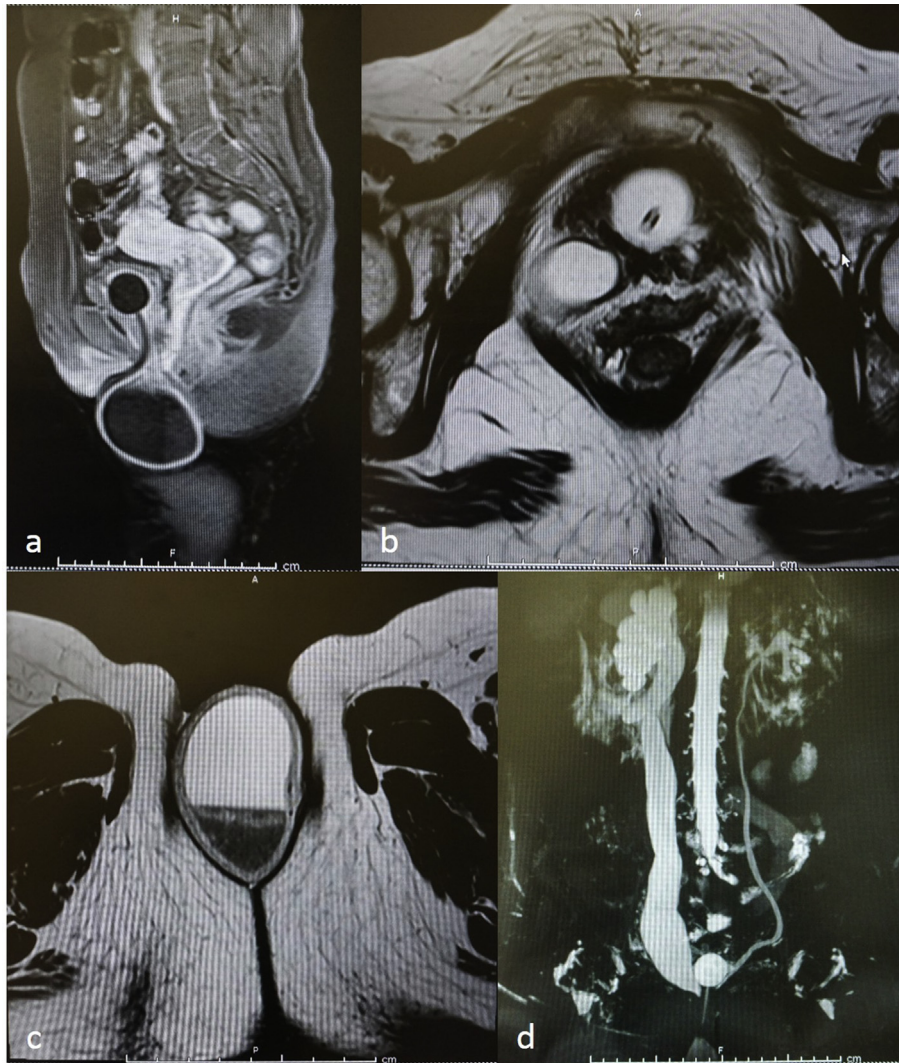


Fig. 2. MRI of pelvis demonstrated the mass originated from urinary tract system and its content showed fluid level. a, T1-weighted MRI, sagittal plane, b, T2-weighted MRI, axial plane at the bladder level, c, T2-weighted MRI axial plane at the mass, and d, coronal reconstruction of urinary tract.

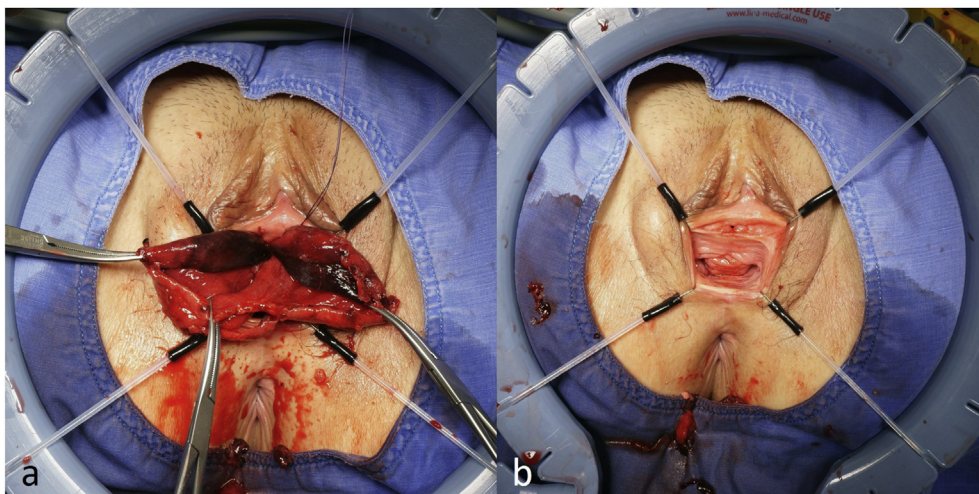


Fig. 3. Intraoperative findings showed a, the mass was opened to decompress and b, the mass was completely excised.

continued leaking of urine and contact bleeding from the mass. She had never had any pain. On physical examination, her vital sign was stable and the mass was 10 × 10 cm in diameter, dark red in color, protruding from urethra without tenderness (Fig. 1). The mass could not be reduced or pushed back into the urethra. Vaginal examination showed no mesh extrusion and no other abnormalities. Urethral catheter could be passed above the mass into the bladder. Emergency magnetic resonance imaging of pelvis was requested and demonstrated prolapsed, single system, ureterocele of right ureter with hydroureteronephrosis (Fig. 2). The patient was counseled to perform cystoscopy, mass excision with or without right ureteric reimplantation. Right ureteric orifice could not be identified from cystoscopy and the mass could not be reduced. Therefore, the mass was carefully opened in order to drain the content and the wall was excised completely at the level of urethral meatus after hanging stitches were placed (Fig. 3). Finally, cystoscopy was performed and demonstrated wide opening of right ureteric orifice without perforation. The patient did not need to perform ureteric reimplantation. She was discharged on the next day without complications. At follow up 3 months, she was doing well and ultrasound kidney showed no right hydroureteronephrosis.

Discussion

Ureterocele may present with various symptoms including urinary incontinence, urinary retention, introitus mass, or asymptomatic. It is usually demonstrated in a girl or young woman and associated with double collecting system.² There are few case reports in adult woman and the treatment is usually depend on a size and reducibility. In single system, transurethral

incision is commonly used³ but it can be performed in reducible prolapsed ureterocele. In this case, it was hard to reduce the prolapsed ureterocele due to midurethral sling which made the urethral lumen narrowing. Therefore, the mass should be excised externally and pushed back carefully after hanging sutures were properly placed. In order to avoid unexpected events, the patient must be counseled for the possible procedure which was reimplantation.

Conclusion

Prolapsed ureterocele is able to be a cause of SUI in aging women even though it is rarely seen in this age group. Carefully history taking and choosing proper investigations can avoid misdiagnosis and help physician select treatments.

Conflicts of interest

None.

Appendix A. Supplementary data

Supplementary data related to this article can be found at <https://doi.org/10.1016/j.eucr.2017.11.022>.

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