Case Report

Labial Cellulitis and Suprapubic Urine Leakage after Midurethral Sling: A Rare Presentation of Unrecognized Bladder Neck Perforation

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Abstract

Retropubic midurethral sling (MUS) is safe and effective surgery used for the treatment of stress urinary incontinence in women. Bladder neck perforation is a rare intraoperative complication. If this complication missed in intraoperative cystoscopy may have serious morbidity. A 52-year-old woman underwent a retropubic MUS. She presented with early and unusual symptoms such as suprapubic and labial cellulitis and urine leakage through the suprapubic incision 1 week after surgery which was due to a missed bladder neck perforation during surgery. In cystoscopy after MUS revealed mesh traversing the bladder neck and it was removed. The missed bladder perforation may have early and unusual symptoms and cystoscopy must be done more carefully and obsessively in patients with risk factors.

Keywords: *Cellulitis, mid-urethral sling, urinary incontinence*

Introduction

Stress urinary incontinence is a complaint that affects 27%–42% of Iranian women.[1] Retropubic tapes have been used for several years.[2,3] Bladder perforation has been reported as a complication, and it is related to the blind passage of trocar.[2,4] The rate of bladder perforation is 2%–9%.[5,6] Undiagnosed bladder perforation has delayed and typical symptom.[4] This is the first case report of suprapubic and labial cellulitis and suprapubic urine leakage resulting from an unrecognized bladder perforation. In this case, bladder neck perforation with trocar passage led to urinary leakage, pelvic urinoma, and accumulation of urine under the suprapubic skin area, which eventually led to labial cellulitis and suprapubic urine leakage.

Case Report

A 52-year-old woman presented to our institution with the complaint of left labia major, suprapubic swelling, and pain. She had a history of anti-incontinence surgery 1 week ago (retropubic midurethral sling [MUS]). In intraoperative cystoscopy, bladder perforation was not detected. Two days after catheter removal and discharge, suprapubic and left labial redness, pain, and swelling began and progressed "Figure 1."

On day of admission, she was afebrile, and her vital signs were stable. In physical examination, suprapubic and left labia major swelling and redness were seen. Vaginal hematoma and mesh erosion were not seen. The patient was admitted to the ward with primary diagnoses of severe reaction to the mesh and infection. Antibiotic therapy and abdominopelvic ultrasonography were done. Ultrasound was normal. The day after, fluid leakage through the left suprapubic incision started, and then, pain and swelling subsided "Figure 2."

The fluid was not purulent or smelly. In cystoscopy revealed mesh traversing, the bladder neck on the patient's left side between the 5- and 7-o'clock positions. The vaginal wall incision was opened, and the mesh was recognized. Traction was applied, and the whole sling was removed. A 20F Foley catheter was left for drainage. Urine leakage stopped, and the patient was discharged the next day. The catheter was removed 10 days later.

Discussion

We present a case who underwent a retropubic MUS and for whom we

How to cite this article: Saberi N, Zargham M, Hayrabedian A. Labial cellulitis and suprapubic urine leakage after midurethral sling: A rare presentation of unrecognized bladder neck perforation. Adv Biomed Res 2021;10:30.

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Received: 03 December 2020
Revised: 27 January 2021
Accepted: 23 February 2021
Published: 14 October 2021

Access this article online

Website: www.advbiores.net

DOI: 10.4103/abr.abr_288_20

Quick Response Code:

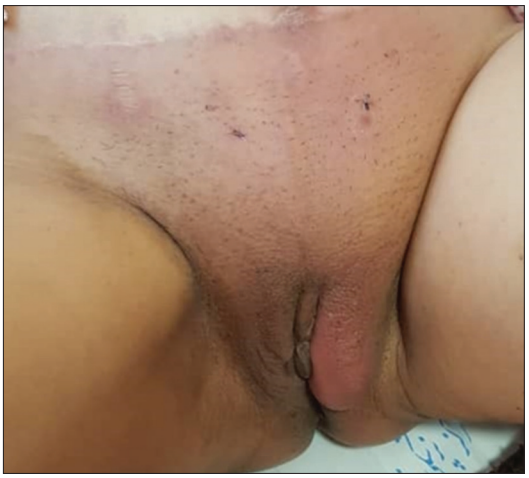

Figure 1: Labial cellulitis

diagnosed as having a missed bladder neck perforation with early and unusual symptoms (suprapubic and labia major cellulitis and urine leakage through the suprapubic incision). At a diagnostic cystoscopy, the misplaced sling material was identified. The missed bladder perforation and subsequent mesh left within the bladder have typical symptoms (lower abdominal pain, recurrent UTI, urgency, frequency, dysuria, and urinary incontinence).[4] The average duration between the diagnosis and treatment is 7–36 months.[7,8] Most of the patients develop calcification and a stone.[9] We report the first case of missed bladder neck perforation which appeared with early and unusual symptoms in the 1st week after surgery. The diagnosis was made by cystoscopy, and the treatment was done with the complete removal of the synthetic material. Predisposing factors for bladder perforation are surgeons' lack of experience, cystocele, advanced age, smoking, diabetes mellitus, low body mass index, previous vaginal, or pelvic surgery.[10,11] Our case has diabetes mellitus and a previous history of vaginal repair. Cystoscopy must be done more carefully and obsessively for cases with predisposing factors. It is not always possible to recognize the misplaced mesh if it is very closely related to the bladder neck.[7] The use of a 70° lens is a very important point in the careful examination of the bladder neck and avoidance of misdiagnosis.[7,8] In our case, bladder perforation was very close to the bladder neck.

Conclusion

Although retropubic MUS surgery is a safe and effective procedure, it can have serious complications. Misplacement of the mesh material through the bladder neck is a rare complication. Suprapubic and labial cellulitis and suprapubic urine leakage can be one of the early manifestations. The cystoscopic evaluation must be performed carefully and obsessively for cases with predisposing risk factors.

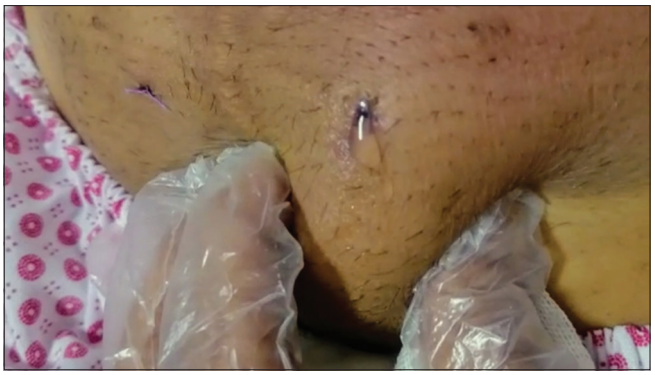

Figure 2: Urine leakage through the suprapubic incision

Statement of ethics

The subject has obtained the patient's informed written consent to publish her photo and details.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that name and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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