

# Endometriosis With Pure Urinary Symptoms

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## INTRODUCTION

Endometriosis is defined as abnormal growth of the endometrial glands and stroma beyond the normal confines of the uterus. Although the condition is usually limited to the ovaries, uterosacral ligaments, and Douglas' pouch, it has been reported in almost every organ of the body. A total of 10% to 20% of women in reproductive ages may be affected. Endometriosis may involve the urinary tract, and the most common site of involvement in this system is the bladder.<sup>(1)</sup> Urinary presentation of pelvic endometriosis without previous genital symptoms is very rare.<sup>(1,2)</sup> In this report, a case of initial urinary presentation of pelvic endometriosis is described.

## CASE REPORT

A 38-year-old woman with 2 children (the 1st child born via normal vaginal delivery, and the 2nd, by cesarean) presented with abdominal pain, urgency, and frequency during the period of menstruation since her second delivery. She had no hematuria, flank pain, or history of urinary calculi. Pelvic examination revealed no abnormal finding, and no palpable mass was detected. However, abdominal ultrasonography revealed a 31 × 14 × 11-mm mass in the posterior bladder wall (Figure 1). Transvaginal ultrasonography demonstrated a hypoechoic 29 × 13-mm node in the posterior bladder wall on the site of cesarean section incision, suggesting endometrioma (Figure 2). On

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Figure 1. Preoperative abdominal ultrasonography showed a focus of soft tissue with the size of 31 × 14 × 11 mm in the posterior bladder wall.

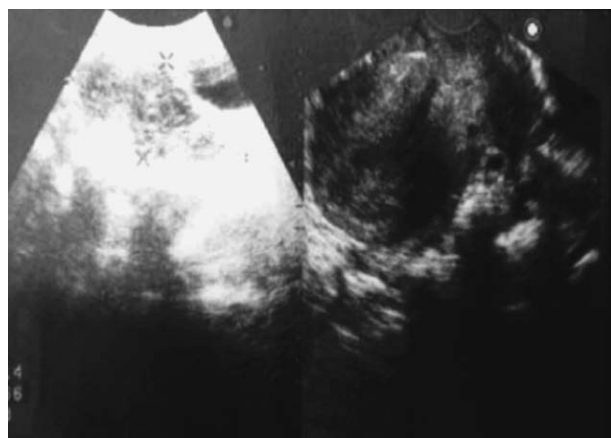
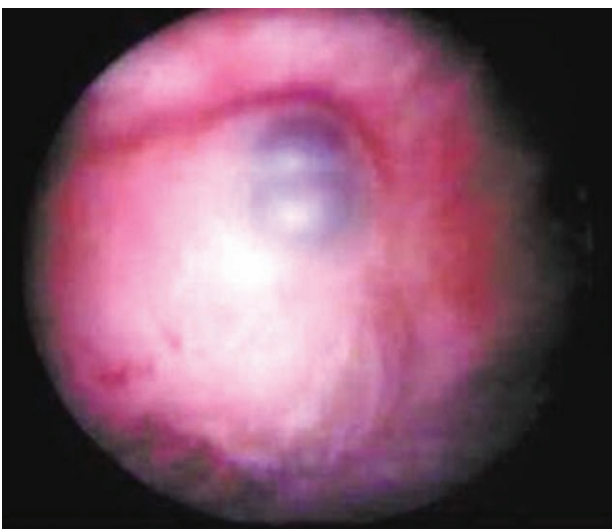


Figure 2. Preoperative transvaginal ultrasonography revealed a 29 × 13-mm hypoechoic node in the posterior bladder wall.

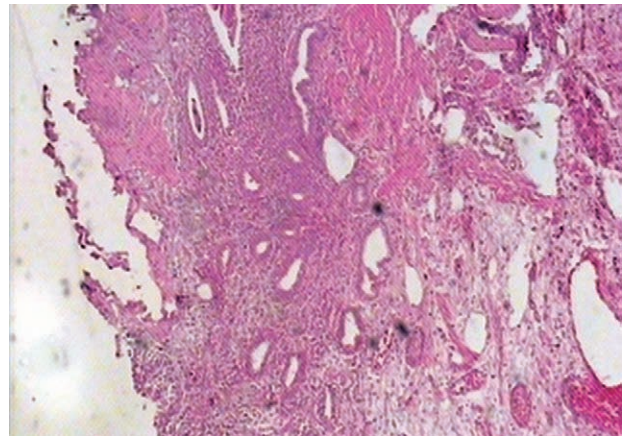
abdominal diagnostic laparoscopy, the uterus, tubes, and ovaries were normal without any adherence and with normal motion. The Douglas' pouch was normal, too. Cystoscopic examination identified a sessile irregular bluish lesion with a nodular surface on the posterior wall of the bladder inferior to the ureteral orifice (Figure 3).

The patient received gonadotropin-releasing hormone analogue for 6 months; however, there was no change in the size of the mass on the second cystoscopic examination. Therefore, the patient underwent transurethral resection of the bladder mass with loop coagulation of the hemorrhagic vessels in the bladder. A urethral catheter was fixed and continuous bladder irrigation was initiated. Postoperatively, the patient had no hemorrhage and no complaints. On the next morning, the urethral catheter was removed and the patient was discharged. Hormone therapy was not administered.

The pathologic findings revealed endometriosis in the bladder with chronic bullous cystitis. The macroscopic size of the mass was about  $2 \times 2 \times 0.5$  cm. Microscopic features demonstrated urinary bladder mucosa with stromal edema, hyperemia, mild chronic inflammatory cell infiltration, and foci of endometrial glands and stroma (Figure 4).



**Figure 3.** The patient's cystoscopic feature of the disease: a sessile irregular bluish lesion with a nodular surface on the posterior wall of the bladder.



**Figure 4.** Urinary bladder mucosa and foci of endometrial glands. Mild chronic inflammatory cell infiltrate and foci of endometrial glands and stroma are seen (hematoxylin-eosin,  $\times 10$ ).

## DISCUSSION

Urinary tract endometriosis is detected in about 1% to 4% of the patients with pelvic endometriosis, and 70% to 80% of which involve the bladder.<sup>(2,3)</sup> The most common presenting symptoms are suprapubic pain along with cyclic irritative voiding symptoms that are aggravated during menstruation. Cyclic hematuria was reported in less than 30% of the patients.<sup>(4)</sup> Transabdominal ultrasonography is very helpful in evaluating the bladder wall.<sup>(5)</sup> For full-thickness lesions suspected of intravesical protrusion, cystoscopy and biopsy during the menstruation period is probably helpful in establishing the diagnosis.<sup>(6)</sup>

Agents including diethylstilbestrol, androgens, oral contraceptives, danazol, and gonadotropin-releasing hormone analogues have been proposed for the treatment of the condition with short-term improvement.<sup>(7)</sup> Surgical therapy, generally used for the individual lesions, includes fulguration with cauterly or laser, resection, and sometimes, oophorectomy and hysterectomy. The most effective option is surgical extirpation of the lesions with hysterectomy and bilateral oophorectomy. Enucleation of the individual endometrial lesion is another procedure with a high success rate.<sup>(1,7)</sup>

Pure urinary symptoms as the initial and solitary presentation of endometriosis are absolutely rare in such patients. Even after complete excision of

the abnormal tissue, new extra-urinary symptoms may develop. Total abdominal hysterectomy and bilateral salpingo-oophorectomy may or may not eradicate the disease; more studies are indicated to elucidate it.<sup>(7)</sup>

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## CONFLICT OF INTEREST

None declared.

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