

Deep infiltrating endometriosis of the uterus involving the urinary bladder

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DESCRIPTION

A 35-year-old female patient, married with two children, presented to us with complaints of haematuria for the last 1 week which was sudden in onset, painless and intermittent. She had lower abdominal pain 6 months ago when she was evaluated and diagnosed as a case of uterine endometriosis for which treatment had already been initiated. She received multiple sessions of monthly injectable leuprolide 22.5 mg and was currently on oral tablet dienogest (oral progestin) 2 mg daily for the last 6 months.

On physical examination, a mass was palpable in the infraumbilical region, which was firm in consistency with irregular margins and did not move with respiration. Her complete blood haemogram and renal function tests were normal.

On cystoscopic evaluation a solid mass around 3×2 cm in size was discovered on the left lateral wall of the urinary bladder with bilateral ureteric orifices visualised with clear efflux of urine. The biopsy showed presence of endometrial glands and stroma in the detrusor muscle. Contrast-enhanced CT of the abdomen revealed a bulky uterus with a soft tissue uterine mass of 9×5.4×5 cm in size involving the anterolateral wall of the uterine body and invading the left lateral wall of the urinary bladder with endoluminal extension of the mass, as shown in figures 1 and 2. Fat planes with other organs were maintained. A diagnosis of deep infiltrating uterine endometriosis with secondary bladder endometriosis was made.

A consultation was taken from gynaecology. As the patient was already on treatment and the disease had progressed, a decision to perform open surgery was taken. After thorough counselling and proper consent, the patient underwent total hysterectomy with bilateral oophorectomy along with partial cystectomy of her pelvic endometriosis. Preoperatively, the left ureteric

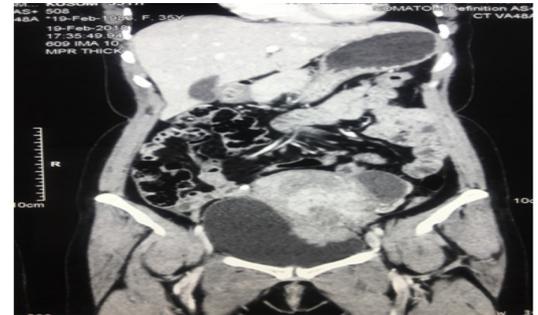


Figure 2 Coronal CT section showing uterine endometriosis involving the left lateral wall of the urinary bladder with endoluminal infiltration.

orifice was stented with 5Fr ureteric catheter. Intraoperatively, the left adnexa was also found adherent to the uterine body. However, the left ureter was free. A cuff of bladder around 4×4 cm in size containing the endometrial tissue was then removed. The urinary bladder was primarily closed in two layers. A per urethral catheter along with an abdominal drain was also placed.

Her drain was removed after 48 hours and the remaining postoperative period was uneventful. At follow-up of 3 months, a repeat CT scan was done which did not reveal any recurrence.

Deep infiltrating endometriosis of the uterus by definition involves more than 5 mm of the peritoneum and has a prevalence of 1% in menstruating women. This condition involves the urinary bladder in 18%–55% of cases.¹

The urinary bladder is involved in 70%–85% of all cases of urinary tract endometriosis, followed by the ureter. It presents with lower urinary tract symptoms such as dysuria, frequency or haematuria.²

Combined hormonal contraceptives and progestogens are the first-line therapy for bladder endometriosis. They are safe, efficacious and easily tolerable. But according to the evidence available, they are not curative and only aid in temporarily suppressing the condition. Apart from this, bladder endometriosis can also be treated surgically. Both transurethral resection (TUR) surgery and segmental bladder resection have been described. In our case, we performed a partial cystectomy for two reasons: (1) hormonal therapy had failed; and (2) a TUR surgery in such an infiltrating exouterine mass would have inadvertently resulted in bladder perforation. It has shown to give excellent long-term results.^{3,4}



Figure 1 Transverse CT section showing bladder endometriosis involving the urinary bladder.

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Learning points

- ▶ Endometriosis is not an uncommon anomaly and can have myriad of presentations with involvement of a number of organs such as the uterus, urinary bladder, ureters and so on.
- ▶ Hormonal therapy (oral contraceptives and progestogens) is considered as the first line of therapy for treatment of bladder endometriosis.
- ▶ If the disease progresses or the presentation is late, then surgery, either in the form of transurethral resection or open segmental bladder resection, can provide excellent long-term outcomes.

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