

Bladder Endometriosis: A Case Report

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Abstract: The present study focuses on the outcome of Endoscopic treatment of bladder endometriosis on a 33-year-old woman. She had been suffering from bladder mass as an incidental finding, in the routine follow-ups, the abdominal sonography showed a 2×3cm lesion in the right side of urinary bladder fundos but she did not have any symptoms. Her bladder mass resected with therapeutic, trans-urethral resection of bladder tumor (TURBT) under spinal anesthesia and didn't have any blood loss. All in all, the pathological finding was compatible with bladder endometriosis.

Key words: Endometriosis • Bladder • Cesarean Section • Cystoscopy

INTRODUCTION

Endometriosis represents the presence of endometrial glands or stroma in abnormal locations outside the uterine cavity [1]. It has an estimated prevalence of 10% in women of reproductive age, with a peak incidence between 30 and 45 years of age [2]. The most common peritoneal sites (in order of decreasing frequency) include the ovaries, uterine ligaments, cul de sac and pelvic peritoneum reflected over the uterus, fallopian tubes, rectosigmoid region and bladder[3].

Judd first reported endometriosis of the urinary tract in 1921 [3]. Urinary tract disease is thought to occur in only 1% of cases, of which 84% involve the bladder [4].

Bladder endometriosis may present with variable symptoms and subtle onset, often mimicking recurrent cystitis. Prompt recognition of this disease entity is important to avoid prolonged morbidity. We report on a case of endometriosis of the bladder with an iatrogenic etiology. The pathogenesis and treatment options are reviewed herein.

Case Report: A 33-year-old woman was referred to us through her gynecologist for the evaluation of a bladder mass as an incidental finding. She had no other diseases.

She didn't have any cyclic bladder pain and no cyclic hematuria during menstruation either; she had a known case of abdominal endometriosis.

She had Gravida 2 with Cesarean sections and had a history of laparoscopic surgery for abdominal endometrial lesions 6 month prior to her first reference to us. She was also on Gonadotropin-Releasing Hormone (GnRH) agonist 6 month prior to her laparoscopic surgery.

Besides, the routine follow-ups on abdominal sonography showed a 2×3cm lesion in the right side of urinary bladder fundos.

This case was diagnosed to be proceeded with diagnostic therapeutic, trans-urethral resection of bladder tumor (TURBT) under spinal anesthesia. There was a tumoral lesion in the right side of fundos of bladder which was totally resected. The surgery lasted for 45 mins. We did not have any blood loss.

The histopathologic section showed bladder biopsy lined by urothelium. Few foci whithin the muscularis propria showed endometrial glands with endometrial stroma (Figure1). No Haemorrhagic areas were noted. The lesion was diagnosed as "Bladder Endometriosis". After a follow-up for two years, she didn't have any symptoms and we didn't observe recurrence of lesion in cystoscopy and sonography any longer.

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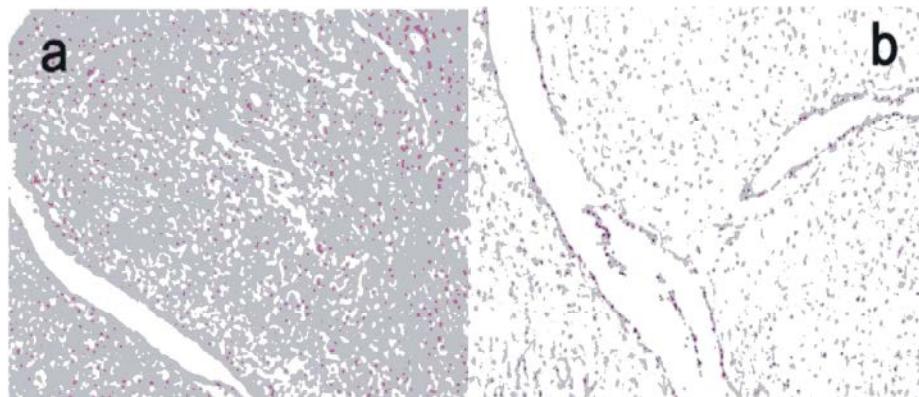


Fig. 1: Photomicrograph of bladder endometriosis.

DISCUSSION

Endometriosis is a common benign gynecological disorder which is characterized by the presence of ectopic endometrial tissue outside the uterus [5,6]. It is usually observed in women of reproductive age. It affects about 10% of women in general population [6]. Bladder endometriosis is a rare pathological entity which is a deeply infiltrating lesion.

The bladder, however, is an infrequent site of endometriosis. It is also estimated that only 1% of patients suffering from this disease come with lesions involving the urinary system [5,7] and the lesion of Endometriosis in the urinary tract involves the bladder in 84% of cases [8].

Patients with urinary tract may have symptoms which may not respond to routine medical management. However bladder endometriosis remains an extremely unusual disease but it may have serious complications. This case study was, however, the first case of Bladder endometriosis in our 24 years of clinical practice in urology field.

The etiology of this pathology remains unclear, however. No single theory can account for the location of ectopic endometrioid in all cases of endometriosis[8] . Theories for the pathogenesis of endometriosis can be classified into 3 basic categories: Coelomic metaplasia and embryonic and migratory theories [8]. Sampson initially reported the migratory theory that menstrual effluent containing viable endometrial cells can be transplanted to ectopic sites [9]. This theory is supported by the ability of endometrial tissue to engraft itself in other areas, as has been observed in many cases of urinary tract endometriosis in patients who have undergone previous uterine surgery [8].

One theory attributes it to the infiltration of the uterine scar by the endometrial tissue after a Cesarean section and, thus, considers it a late iatrogenic complication. This theory was compatible with our patient who was gravida 2 with 2 Cesarean section history.

Bladder endometriosis may come with variable symptoms and subtle onset, often mimicking recurrent cystitis [8]. Patients with bladder endometriosis often present frequency, dyspareunia, dysuria and hematuria and cyclic menstrual hematuria may also occur [8,10]. Diagnosis is often delayed because symptoms can overlap with other diseases in women such as cystitis [11] and so on. In contrast, our patient didn't have any symptoms like this. She was probably on GNRH agonist.

Open resection has been the standard treatment for bladder endometriosis [5]. Alternative treatments through laparoscopy or cystoscopy have been increasingly reported as equally effective with less invasiveness despite their complicated techniques and necessary sophisticated skills. In our case, we had no prior bladder pathology, so we treated the tumor as other bladder lesions.

Akhter reported a patient with an endometriotic mass in the bladder 2×3cm on the posterior wall which was resected through cystoscopy [12].

Castillo reported nine patients who underwent laparoscopic partial cystectomy for the treatment of various pathologies including endometriosis. No conversion to open surgery was needed, nor were intra-operative complications recorded [13].

Granese studied the treatment outcome in women affected by isolated bladder endometriosis who underwent laparoscopic surgery after the failure of medical treatment [7]. The surgery completed in all cases with no intra-operative complications, however.

Chen reported a partial cystectomy is the preferred treatment for full-thickness lesions of the bladder because of the limited success rate of hormonal treatment [8]. With regard to our successful outcome, we believe that an Endoscopic treatment (TURBT), in the hand of an expert surgeon, is a matter of choice.

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