A Suprapubic Trocar Port Site Endometriosis Metastatic to Deep Bladder and Induced Right Hydroureteronephrosis: A Case Report

Cheng-Wei Yu¹, Lee-Wen Huang², Yieh-Loong Tsai² and Kok-Min Seow³*
¹Department of Obstetrics and Gynecology, Shin-Kong Wu Ho-Su Memorial Hospital, Taiwan
²Department of Obstetrics and Gynecology, College of Medicine, Fu-Jen Catholic University, Taiwan
³Department of Obstetrics and Gynecology, National Yang-Ming University, Taiwan

Abstract

Endometriosis located at the urinary tract and/or trocar port site is extremely rare. We present the first case of endometriosis occurs at trocar port site initially, and metastatic to deep bladder and induced the complication of right hydroureteronephrosis. A 39 years old female, married, who had been previously operated on for right ovarian endometrioma 2 years ago by laparoscopy, complaining of a cyclical painful mass at the previous suprapubic trocar site for at least six months. She did not pay much attention to it. Hematuria for ten days during menstrual period was noted three months later. CT-scan demonstrated a suprapubic trocar port site mass, measured 5 cm, and suspected endometriosis. The endometriotic mass extended from suprapubic site to bladder area. Office cystoscopy revealed some papillary mass at right trigone area. Kidney ultrasonography revealed right hydroureteronephrosis. The mass was excised, and the bladder endometriosis was resected with therapeutic, Trans-Ureteral Resection of Bladder Tumor (TURBT). After the excision, both the hematuria and right hydroureteronephrosis were subsided. In conclusion, although bladder endometriosis is rare, however, if combined with hematuria and a painful mass in the trocar port scar who had a history of pelvic or obstetric surgery, the physician should consider endometriosis.

Keywords: Endometriosis; Hydroureteronephrosis; Trocar site endometriosis; Bladder endometriosis

Introduction

Endometriosis is defined as endometrial glands and stroma at extraterine sites. These ectopic endometrial implants can be intrapelvic or extrapelvic. Extrapelvic endometriosis can occur thorough the body, but, rarely, at the trocar port site and bladder [1]. The estimated prevalence of endometriosis is about 10%. Urinary tract disease or trocar port site is thought to occur in only 1% of cases [2]. Both trocar port site and bladder endometriosis can cause severe discomfort, such as severe painful during menstrual cycle in scar endometriosis and hydroureteronephrosis may occur in deep infiltrating bladder endometriosis. Both diseases, however, rarely occur simultaneously in the same patient.

Herein, we present the first case of endometriosis at the suprapubic trocar port site, and metastatic to a deep infiltrating endometriosis on the bladder complicated with hematuria and hydroureteronephrosis who had previously undergone laparoscopic resection of a right ovarian endometriotic cyst.

Case Presentation

A 39-year-old married woman, gravida 0, para 0, presented with hematuria last for ten days menstrual and post-menstrual every month for more than one year prior to diagnosis. She had a history of laparoscopic right oophorohysterectomy for endometrioma 2 years ago. She also complained of cyclical pain during menstrual period and the pain was severe in lower abdomen, and had worsened progressively over the previous six months. On palpation, a hard, firm and irregular border mass, measured 5 cm fixed to the surrounding tissues was detected at the previous 5-mm suprapubic trocar port site. Laboratory test revealed high level of CA-125 of 164 U/ml. Transvaginal ultrasonography showed no recurrent of endometrioma. However, hematuria was noted three months after the suprapubic trocar site mass. Office cystoscopy revealed some papillary mass at right trigone area.
trigone area (Figure 1) and incisional biopsy was performed, and the specimen was sent for routine histopathological examination and was reported endometriosis. Kidney ultrasonography was performed and showed right sided hydroureteronephrosis. We advised a contrast enhanced computed tomography scan of the abdomen and pelvis, and demonstrated a heterogeneously enhancing mass associated with lobulated border, measuring 5 cm located at anterior pelvic wall rectus abdomens muscle area, suspected endometriosis. In addition, the endometriotic mass growth extended to the deep bladder with a heterogeneously enhancing mass, measuring 5.1 cm located at right posterior aspect of the bladder, associated with obstructive hydroureter and hydronephrosis. Following detailed multi-disciplinary discussion and informed consent, she underwent excision of the abdominal wall lesion with flap reconstruction. Cystoscopy demonstrated the bladder tumor growth into the right ureter and the ureteral orifice was 90% obstructed. The bladder mass was resected with therapeutic, Trans-Ureteral Resection of Bladder Tumor (TURBT) and right Double-J placement. Kidney ultrasonography three days after the surgery revealed complete relieved of the hydroureteronephrosis. The patient was discharged on the 4th postoperative day in a satisfactory condition. The pathohistological specimen demonstrated both the excised bladder nodule and the anterior pelvic wall mass were endometriosis. Two weeks the surgery, the level of CA-125 was declined to 25 U/ml. As postoperative medical treatment, the patient was prescribed visanne 2 mg a day for 6 to 12 months.

**Discussion**

Trocar site endometriosis and bladder endometriosis after laparoscopic surgery are a rare extrapelvic endometriosis, and rarely happen in the same patient. Herein, we report the first case of laparoscopic trocar site endometriosis and bladder endometriosis happened simultaneously in the same patient.

Patients with surgical scar endometriosis are always suspected as abdominal wall hematoma, suture granuloma or inguinal hernia initially. The diagnosis of scar endometriosis is always make if the patients have the symptoms of palpable mass in the abdominal wall, cyclic pain, and a previous gynecologic procedure or patient with history of treated pelvic endometriosis. The symptoms of bladder endometriosis include dysuria, urinary frequency or urgency, and suprapubic pain; rarely, patients might mention hematuria coinciding with menses and hydroureteronephrosis [1]. Our patient has both the symptoms of abdominal mass with cyclic pain initially, and hematuria during menstruation thereafter. According to these symptoms, we therefore could make an accurate diagnosis of extrapelvic endometriosis in this patient and metastatic from suprapubic trocar site to deep bladder area.

The treatment for trocar site endometriosis is a wide local excision of the lesion with at least 5 mm to 10 mm of healthy tissue as surgical margin, even for recurrent disease and great attention must be paid not to break the mass during excision to prevent the re-implantation of microscopic endometrial cells [4]. Treatment of bladder endometriosis is aimed at resolving symptoms. The aim of surgical treatment of bladder endometriosis is complete excision of symptomatic endometriotic lesion to prevent recurrence.

In summary, trocar port site and bladder endometriosis is rare, and extremely rare if both the disease occur simultaneously in the same patient. The disease should be considered as an important differential diagnosis in females with a positive history of prior laparoscopic surgery, presented with mass at the site of the surgery and catamenial hematuria.

**References**