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Clinical images

Laparoscopic excision of bladder peritoneal endometriosis

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A 24-year-old woman presented with progressively increasing dysmenorrhea for the last 2 years. She had multiple prior consultations for abdominal pain and fullness. Her menstrual cycle was normal in amount and duration. She was not sexually active and had no urinary or bowel complaints. At the age of 13 years, she underwent a laparotomy for intestinal obstruction. Two years ago she was evaluated for the same complaints, when a 4.5-cm chocolate cyst was seen but no treatment was given. General and abdominal examination was normal. Relevant blood and imaging studies were done. Ultrasound showed a right ovarian endometrioma of 7 cm. Laparoscopic enucleation was planned. On laparoscopy, excision of right ovarian endometrioma was done. There was anterior *cul de sac* peritoneal endometriosis that was excised (Figure 1) and cauterized (Figure 2). Posterior *cul de sac* peritoneal endometriosis was also cauterized (Figure 3). The bladder defect was repaired with 3-0 Vicryl. Cystoscopy was done to check bladder integrity and ureteric reflux. She was discharged in a satisfactory condition and is on regular follow-up. Her abdominal pain and dysmenorrhea have markedly reduced. Endometriosis is a common gynecological problem affecting ovaries, fallopian tubes, uterosacral ligaments, pouch of Douglas, and rectum. Urinary tract endometriosis affects 0.3–12% of all women with endometriosis, with the bladder being involved in 80% of cases.¹ In women with deep infiltrating endometriosis, involvement of the urinary tract can be found in up to 52% of cases. Bladder endometriosis is rare and seen in only 1–2% of cases. One-third patients are usually

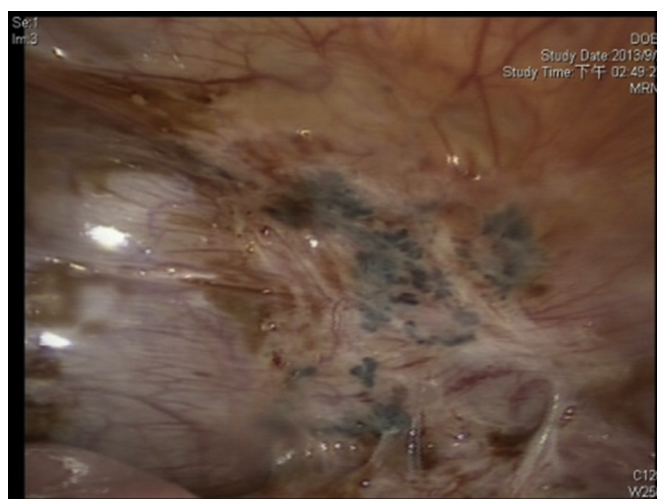
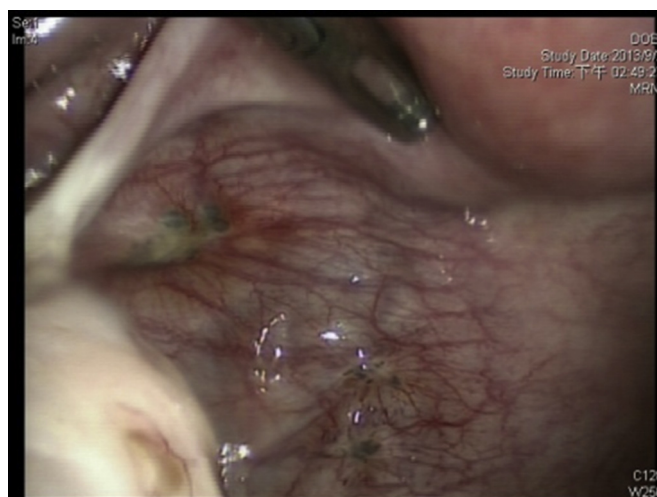


Figure 1. Endometriotic spots on the bladder peritoneum.

Figure 2. Endometriotic spots on the posterior *cul de sac*.

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E-mail address: kghuang@ms57.hinet.net (K.-G. Huang).<http://dx.doi.org/10.1016/j.jgmt.2016.06.005>2213–3070/Copyright © 2016, The Asia-Pacific Association for Gynecologic Endoscopy and Minimally Invasive Therapy. Published by Elsevier Taiwan LLC. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

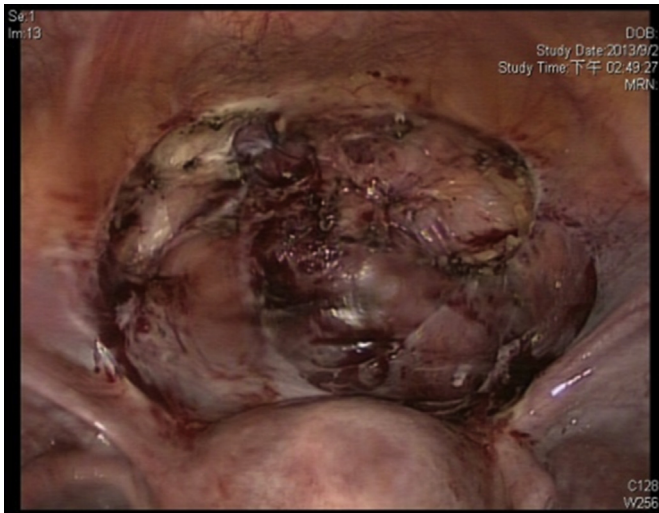


Figure 3. Resected view of the bladder peritoneum.

asymptomatic. Varied symptoms like cyclical hematuria, abdominal pain, dysmenorrhea, menorrhagia, and recurrent cystitis have been seen.^{2,3} Dysuria, urinary urgency and frequency, painful micturition, burning sensation in the urethra, and discomfort in a retropubic area are commonly reported.⁴ Transabdominal and

transvaginal ultrasound is the diagnostic modality of choice.² Magnetic resonance imaging (MRI) is considered the gold standard for urinary tract endometriosis. Sensitivity of 3 Tesla MRI is 88% with a specificity of 98%.⁵ MRI is especially useful when deep-infiltrating disease is suspected.³ A multidisciplinary team approach including urologist, colorectal and laparoscopic surgeons and radiologist should be involved. Hormonal treatment is an attractive option for young patients. Transurethral resection of the bladder and laparoscopic partial resection of the bladder allows for maintenance of full bladder functions and are good options in experienced hands.^{3,6} Thus, bladder endometriosis should be suspected in women who present with atypical symptoms and in those who do not respond to conventional treatment.

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