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Case Report

Deep Infiltrating Endometriosis Presenting with Subacute Bowel Obstruction and Pelvic Abscess

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Abstract

Endometriosis is a gynaecological condition in which endometrial-like tissue grows outside the uterus, causing inflammation and pain. Deep pelvic endometriosis can involve the bowel, bladder, and other organs, causing various symptoms, including abdominal pain, dyspareunia, and subfertility. Surgical treatment is often required for deep pelvic endometriosis; radical excision can result in complete symptom resolution. We present a case report of a 48-year-old Filipina woman with a history of laparotomy ovarian cystectomy and large bilateral endometriomas with intestinal endometriosis. The patient presented with a four-month history of severe abdominal pain, distension, and fever of unknown origin. Despite several hospital admissions, the diagnosis remained elusive until clinical assessment suggested deep pelvic endometriosis, partial bowel obstruction, and possible pelvic abscess. A multidisciplinary team consulted on the diagnosis and chose a radical surgery approach.

Introduction

Deep infiltrating endometriosis (DIE) is a severe form of endometriosis, a common gynaecological disorder affecting women of reproductive age (1). Endometriosis is characterised by the growth of endometrial-like tissue outside of the uterus, which can cause chronic pelvic pain, infertility, and other symptoms. DIE is a specific subtype of endometriosis that can deeply infiltrate surrounding tissues, including the bowel, bladder, and nerves, leading to debilitating symptoms and significant impairments in quality of life. Despite the high prevalence of endometriosis, DIE remains challenging to diagnose and treat, often requiring multidisciplinary management and surgical intervention (2). Herein we present a case of a 48-year-old woman with a history of endometriosis-related surgeries who presented with severe abdominal pain, distension, and fever. Despite multiple hospital admissions, the diagnosis of deep pelvic endometriosis with partial bowel obstruction and the pelvic abscess was only made after clinical and radiological assessments using ultrasound and MRI (3). The patient underwent successful radical surgery to remove affected organs with no postoperative complications.

Case Presentation

We present a case report of a 48-year-old Filipina woman, G1P1, who had a previous cesarean section via midline laparotomy in the Philippines. In 2014, the patient underwent laparotomy ovarian cystectomy, and two years ago, she was diagnosed with large bilateral endometriomas with intestinal endometriosis. The patient presented with a four-month history of severe abdominal pain, distension, and fever of unknown origin. She had several hospital admissions in other facilities but no diagnosis or improvement.

The clinical assessment suggested deep pelvic endometriosis, partial bowel obstruction, and possible pelvic abscess. Radiology at our institution showed large bilateral ovarian endometriomas (Figure A) with extensive deep infiltrating endometriosis of the rectosigmoid colon causing subacute obstruction, nodules in both uterosacral ligaments and the back of the uterus (Figure B), adenomyosis, and extensive bowel and uterine adhesions. A multidisciplinary team reviewed the patient, and radical surgery was decided upon to remove the uterus, ovaries, and affected bowel.

The patient underwent total laparoscopic hysterectomy with bilateral salpingo-oophorectomy En bloc, with large 15cm nerve-sparing segmental bowel resection and uterine artery ligation at the origin. Small bowel resection anastomosis was also performed due to a fistula between the small intestine and pelvic abscess along with the radical excision of deep infiltrating endometriosis of the uterosacral ligaments. The surgery concluded with the insertion of bilateral double J stents of the ureters. The surgery took 4 hours and was completed successfully without intraoperative complications.

Postoperative Management: The patient was transferred to the intensive care unit (ICU) to monitor and manage her postoperative course closely. Histology confirmed deep infiltrating endometriosis in all specimens with chronic inflammatory changes in both ovarian cysts due to infection.

She was started on antibiotics and bowel rest and gradually advanced to a clear liquid diet. Her postoperative course was uneventful, and she was transferred out of the ICU on postoperative day 2.

The patient was discharged on postoperative day eight after an unremarkable postoperative course. The final histopathology report confirmed the presence of endometriosis in the uterus, fallopian tubes, ovaries, uterosacral ligaments, and small bowel. The patient was followed up in the outpatient clinic at two weeks, six weeks, and three months postoperatively. Her recovery was unremarkable, and she reported significant improvement in her symptoms. The bilateral double J stents were removed six weeks postoperatively. At the 3-month follow-up, she was asymptomatic, and her incisions had healed well.

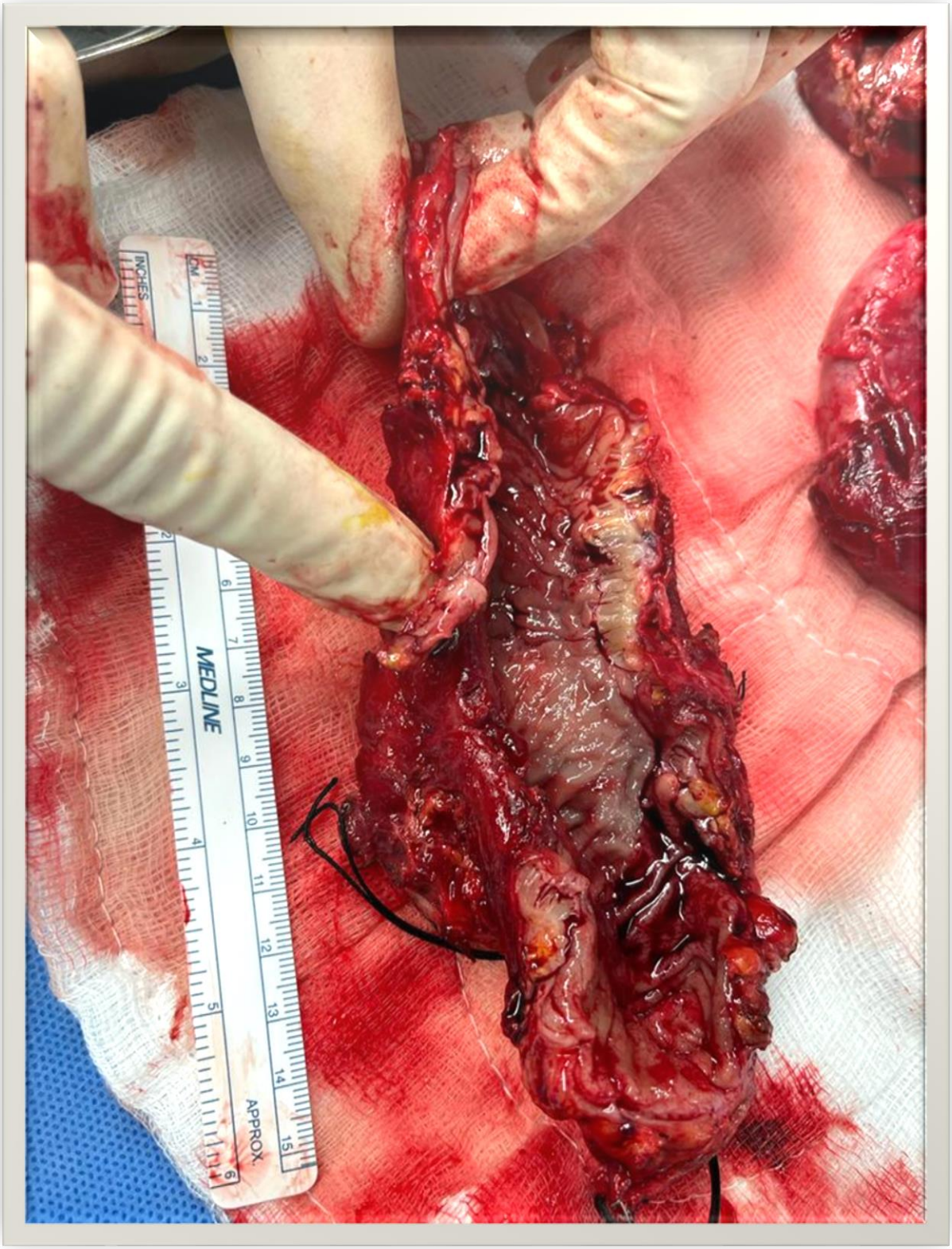

Figure 1: 15cm segment of rectosigmoid colon with multiple sub occlusive DIE nodules

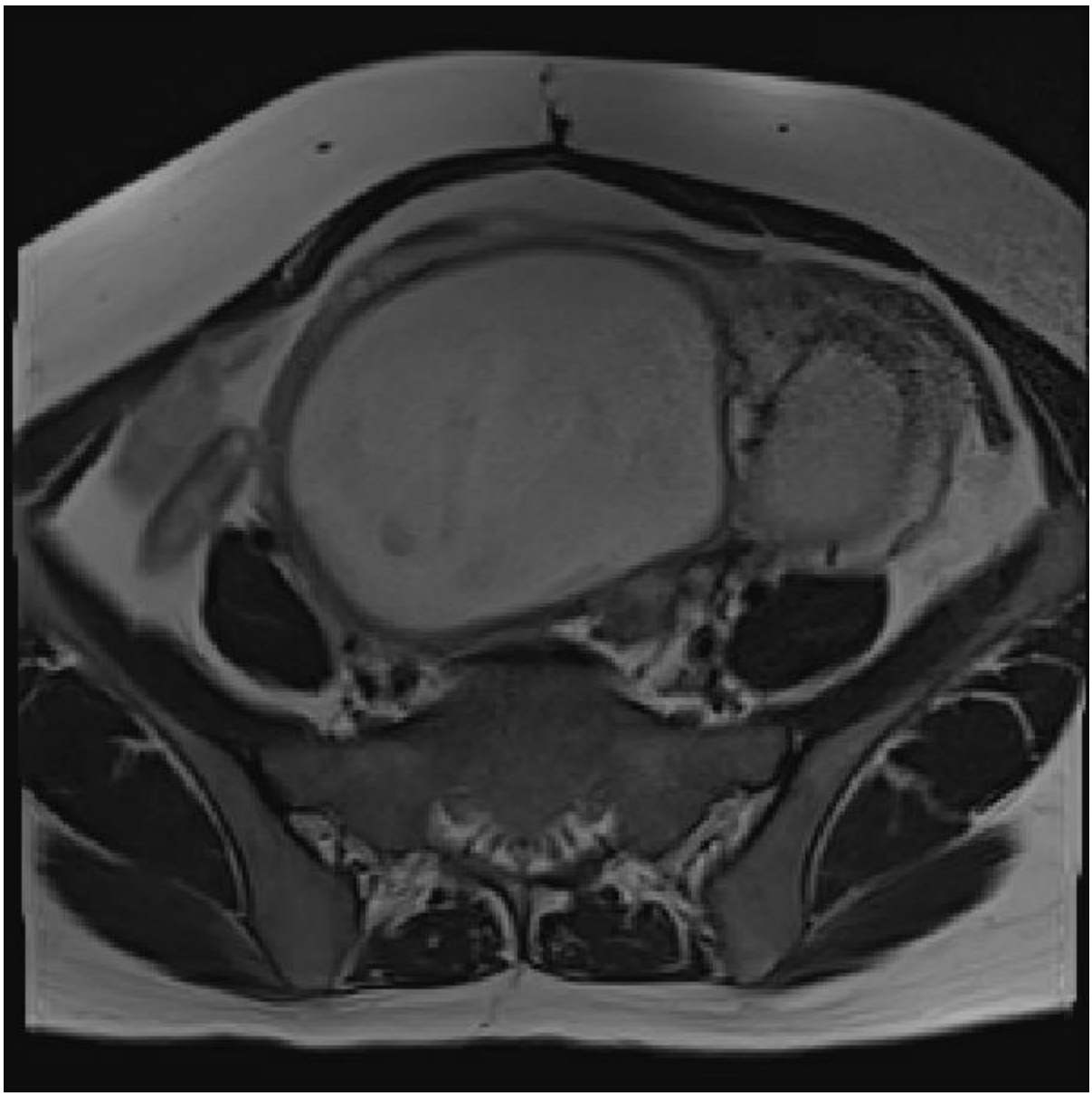

Figure 2: MRI pelvis showing bilateral large ovarian endometrioma with preserved outline ruling out malignancy.

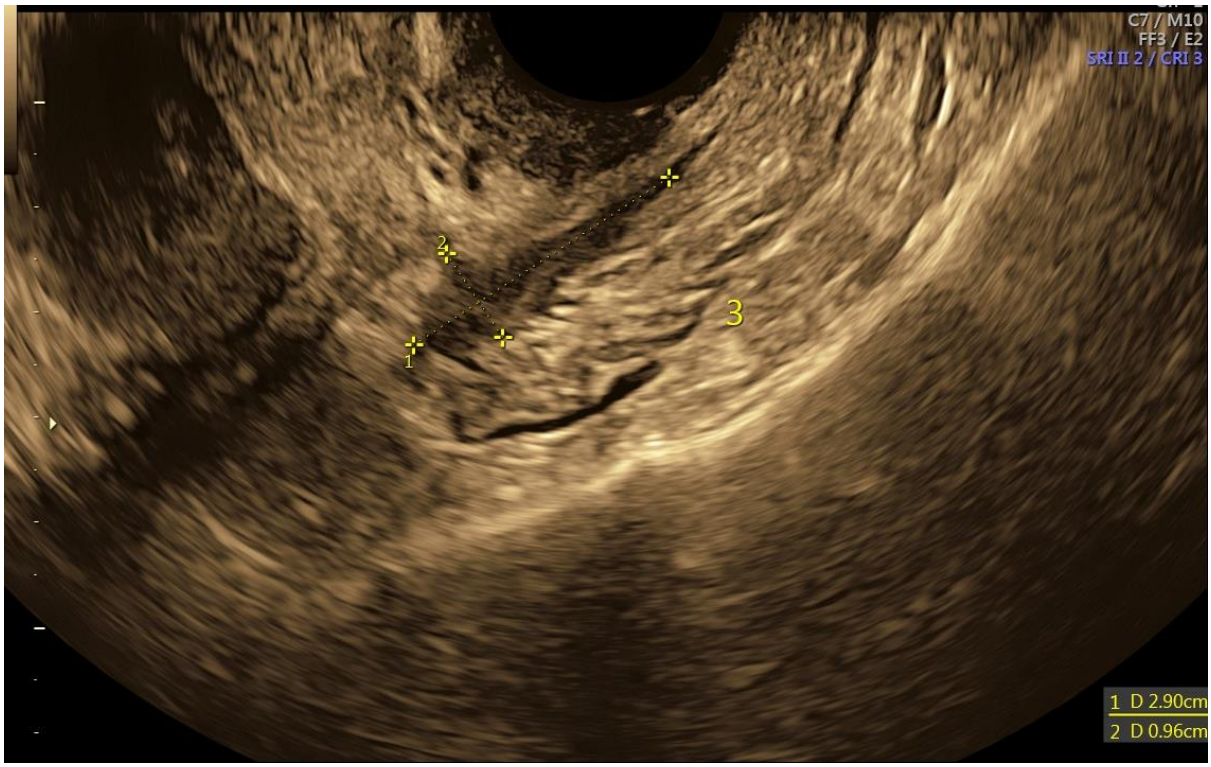

Figure 3: Full thickness bowel involvement with deep infiltrating endometriosis.

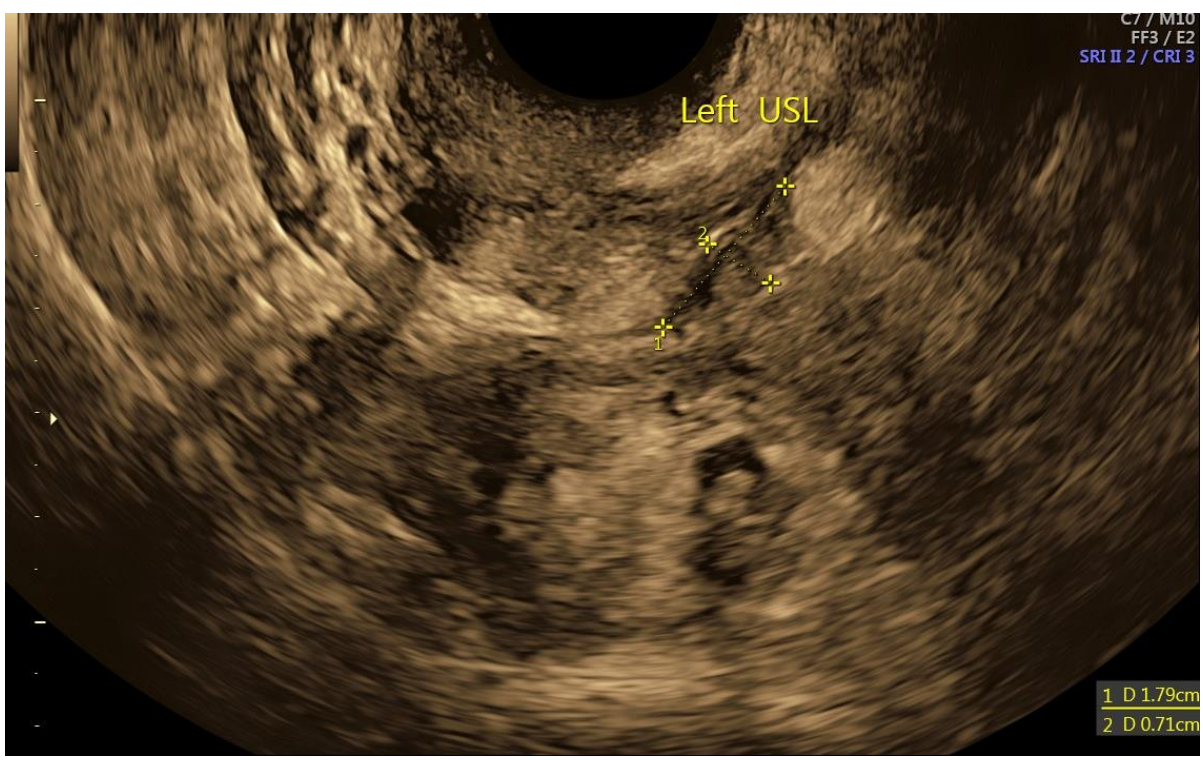

Figure 4:DIE nodule of left uterosacral ligament

Discussion

DPE involving the bowel is a challenging condition to manage, and the optimal treatment strategy depends on the extent and severity of the disease (4). The multidisciplinary approach involving an endometriosis specialist, a colorectal surgeon, and a urologist is often necessary for optimal outcomes. Laparoscopic surgery is the preferred approach for managing DPE, as it offers the benefits of less postoperative pain, shorter hospital stays, and faster recovery.

Endometriosis is a common gynecologic disorder that affects millions of women worldwide. While it primarily affects the pelvic region, it can also involve other organs, including the bowel. Bowel involvement in endometriosis can cause many symptoms, including abdominal pain, bloating, bowel obstruction, abscess formation, and fistula formation. Managing deep pelvic endometriosis involving the bowel can be challenging, and a multidisciplinary approach is required to achieve successful outcomes. Surgery remains the mainstay of treatment for deep infiltrating endometriosis involving the bowel, and laparoscopic excision is the preferred approach(5). In the current case, a radical surgical approach was taken, which involved total hysterectomy, bilateral salpingo-oophorectomy, and bowel resection with excision of deep infiltrating endometriosis. This case highlights the importance of a multidisciplinary approach to managing complex cases of deep pelvic endometriosis (6). It also suggests that radical surgical treatment may be viable in appropriately selected patients with extensive disease involvement (4). However, careful patient selection, preoperative planning, and surgical expertise are essential for successful outcomes. Further studies are needed to determine the optimal management approach for complex cases of deep pelvic endometriosis.

Conclusion

In conclusion, this case report highlights the challenges in diagnosing and managing complex cases of deep pelvic endometriosis. The patient presented with a history of endometriosis and a previous cesarean section. Her symptoms were consistent with deep infiltrating endometriosis involving the bowel causing partial obstruction and possible pelvic abscess. Multidisciplinary assessment and planning were crucial in guiding the decision to perform radical surgery, which involved total hysterectomy, bilateral salpingo-oophorectomy, bowel resection, and excision of deep pelvic endometriosis. The surgery was successful without intraoperative complications, and the patient recovered completely with no postoperative complications. Follow-up visits showed no intricacies and complete resolution of symptoms.

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