

## Endometrioma of the abdominal wall: a case report

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Endometrioma of the abdominal wall: a case report

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### Abstract:

*This is a report of a case of endometrioma of the abdominal wall in a 34-year-old woman who had a two-year history of lower abdominal pain. The physical examination revealed an ill defined mass with tenderness. Computed tomography showed an enhancing isodense mass at the midline-right rectus abdominis muscle. The patient was treated with a mesh grafting repair following a wide radical resection with a 1 cm margin. There were no postoperative complications. The histological examination confirmed endometriosis. The patient is now on regular follow-up and doing well without any recurrence, five months after her operation.*

**Key words:** endometriosis, abdominal wall, endometrioma

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### บทคัดย่อ:

รายงานผู้ป่วยก้อนเยื่อบุผนังช่องท้อง 1 ราย ผู้ป่วยหญิง อายุ 34 ปี มาโรงพยาบาลด้วยอาการปวดท้องด้านล้างเรื้อรังนาน 2 ปี ตรวจร่างกายพบก้อนที่คลำได้ไม่ชัดเจน และมีอาการเจ็บที่ผนังหน้าท้อง ภาพถ่ายรังสีคอมพิวเตอร์แสดงก้อนเนื้อนอกที่บัสแสงที่กลางผนังหน้าท้องตรงตำแหน่งกล้ามเนื้อ rectus abdominis ผู้ป่วยได้รับการผ่าตัดเอาก้อนเนื้อออกพร้อมกับเนื้อเยื่อที่ติดโดยรอบกว้าง 1 ซม. และซ่อมผนังหน้าท้องด้วยวัสดุสังเคราะห์ โดยไม่มีภาวะแทรกซ้อนหลังการผ่าตัด รายงานผลพยาธิวิทยายืนยันภาวะเยื่อบุผนังช่องท้องที่ ผู้ป่วยมาติดตามอาการหลังการผ่าตัด 5 เดือนตามนัด และไม่พบภาวะการกลับเป็นซ้ำ

คำสำคัญ: ภาวะเยื่อบุผนังช่องท้อง, ผนังหน้าท้อง, ก้อนเยื่อบุผนังช่องท้อง

### Introduction

Endometriosis is defined as growth of the endometrial gland and stroma outside the uterine cavity, which can respond to ovarian hormonal stimulation. Endometrioma is a well circumscribed mass of endometriosis. Abdominal wall endometriomas usually occurs as a secondary process involving a surgical scar. Since the diagnosis of scar endometrioma is rarely established prior to surgery, endometriosis should be included in the differential diagnosis of masses on the abdominal wall. We herein report a recent case of abdominal wall endometriosis (AWE) from southern Thailand as a reminder to the general surgeon to be attentive in the diagnosis of at-risk patients.

### Case report

A 34-year-old woman presented with a two-year history of lower abdominal pain that had become progressively worse over the preceding six months. The pain was cyclical beginning few days prior to menses. She had undergone a caesarean section at full term five years previously.

The physical examination revealed a well healed lower midline scar. There was no discoloration of the skin. There was some induration in the lower abdominal area, with an ill defined mass; which was fixed, of hard consistency and mild tenderness. A clinical diagnosis of abdominal wall tumor was considered.

A previous ultrasonograph had shown a rather defined fusiform hypoechoic mass in the area of the lower rectus muscle, normal uterus and adnexa. Computed tomography revealed an enhancing isodense mass (2.6 x 3.7 x 8 cm) at the midline-right rectus abdominis muscle. The subcutaneous fat was invaded, and the peritoneum was also involved (Figure 1).

The patient was treated with a mesh grafting repair following a wide radical resection with a 1 cm margin. There were no postoperative complications. The histological examination confirmed endometriosis. After the surgery, the patient have no medical treatment. The patient is now on regular follow-up and five months after the operation is doing well without any recurrence.

Endometrioma of the abdominal wall



Figure 1 Computed tomography scan of the abdominal wall endometrioma

## Discussion

The most common site of endometriosis is the pelvis, followed by the ovaries, pouch of Douglas, uterine ligament, rectovaginal septum, uterine cervix, and inguinal hernial sac. The extrapelvic sites include the rectosigmoid, ileum, appendix, lungs, gallbladder, bowel, kidneys, central nervous system, extremities, perineum, and abdominal wall.<sup>1-2</sup> Postoperative endometriomas occurs most commonly after surgical procedures on the uterus and fallopian tubes. Several pathophysiological theories for endometriosis have been suggested. The most likely explanation is iatrogenic implantation of endometrial tissue during surgery, particularly caesarean sections. The incidence of endometriosis after caesarean section ranges from 0.03% to 0.45%.<sup>2</sup> Primary cutaneous endometriosis has also been documented at sites such as the umbilicus, vulva, perineum, groin, and extremities. It may also occur following lymphatic or vascular transplantation or metaplasia.<sup>3</sup>

The clinical presentation of AWE is a tender mass within or adjacent to a surgical scar. The pain is usually intermittent and associated with the patient's menstrual cycle but may be constant in nature. The overlying skin may be hyperpigmented due to deposition of hemosiderin. The interval from original surgery to onset of symptoms has been recorded as anywhere from six months to 20 years. A gynecological examination is recommended because a concomitant pelvic endometriosis may be encountered in patients with AWE. The differential diagnosis for abdominal wall endometrioma may include desmoid tumor, hernia, suture granuloma, hematoma, cyst, abscess, sarcoma and/or metastatic carcinoma.

An ultrasonographic examination can determine the size of the lesion, help determine if the nature of mass is cystic or solid, and help to exclude underlying intra-abdominal pathological factors. The sonographic appearance of endometrioma is nonspecific and may change during the course of the menstrual cycle. A CT usually appears as a circumscribed solid or mixed mass, enhanced by contrast, and may show hemorrhage. The MRI shows a low signal within the mass.<sup>4</sup> The different imagings are nonspecific but useful in determining the extent of the disease, and assisting in the planning of operative resection. Fine-needle aspiration may be used to

diagnose endometrioma in isolated cases but should be used only with caution as needle tract endometriosis has been reported.<sup>1</sup>

The treatment of choice is wide excision with a 0.5 to 1 cm margin. Care must be taken not to rupture the mass to avoid reimplantation of microscopic remnants of endometrial tissue. Complete excision may necessitate a synthetic mesh placement or tissue transfer for abdominal wall closure. Recurrences have been associated with larger and deeper lesions that were difficult to remove completely. Medical management with hormonal therapy may produce only temporary alleviation of symptoms, with extreme adverse effects followed by recurrence after the cessation of drugs. Surgeons should also be aware that endometrial carcinomas have been reported.

## Conclusion

**Endometriosis of the abdominal wall is a rare condition and unfamiliar to most general surgeons. Clinical presentations and imaging study may not be sufficient for diagnosis, since the condition is often diagnosed only upon postoperative histological examination. Wide excision is the treatment of choice for abdominal wall endometrioma.**

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