

# เยื่อบุโพรงมดลูกเจริญผิดที่ขนาดใหญ่คล้ายมะเร็งรังไข่จากเอ็กซเรย์ คอมพิวเตอร์: กรณีศึกษา

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## Extremely Large Ovarian Endometriotic Cyst Presenting with Imaged Diagnosis of Ovarian Cancer: A Case Report

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**หลักการและวัตถุประสงค์:** เยื่อบุโพรงมดลูกเจริญผิดที่ เป็นภาวะที่พบบ่อยในสตรีวัยเจริญพันธุ์ อาการสำคัญ ได้แก่ ปวดประจำเดือนมากขึ้น มีบุตรยาก และถุงน้ำในอุ้งเชิงกราน ซึ่งส่วนใหญ่ภาวะดังกล่าวจะมีขนาดไม่เกิน 12 เซนติเมตร งานวิจัยนี้ต้องการรายงานกรณีศึกษาเยื่อบุโพรงมดลูกเจริญผิดที่ที่มีขนาดใหญ่ ซึ่งค่อยๆโตขึ้น ภายใน 1 ปี

**กรณีศึกษา:** เป็นการรายงาน กรณีศึกษาสตรีอายุ 26 ปี คลำพบก้อนที่ท้องน้อยและมีขนาดโตขึ้นเรื่อยๆ ร่วมกับมีปวดประจำเดือนมาก ผลจากการตรวจเอ็กซเรย์คอมพิวเตอร์ พบก้อนที่รังไข่ลักษณะคล้ายมะเร็ง ขนาด 30 เซนติเมตร หลังจากเข้ารับการผ่าตัดรังไข่และปีกมดลูกด้านขวา และเลาะถุงน้ำรังไข่ด้านซ้าย ผลพยาธิวิทยาพบเป็นเยื่อบุโพรงมดลูกเจริญผิดที่ ที่รังไข่ทั้งสองข้าง

**สรุป:** ลักษณะอาการของภาวะเยื่อบุโพรงมดลูกเจริญผิดที่ อาจมีลักษณะคล้ายมะเร็ง ดังนั้น ควรดูแลผู้ป่วยกลุ่มดังกล่าวด้วยความระมัดระวังและติดตามการรักษาเป็นระยะเวลานานอย่างน้อย 5 ปี มากกว่านั้น การให้คำปรึกษาเกี่ยวกับแนวทางการรักษามีความสำคัญมาก โดยเฉพาะผู้ป่วยอายุน้อย ไม่ควรรีบตัดสินใจผ่าตัด staging โดยอิงผลการตรวจจากภาพทางรังสีเพียงอย่างเดียว

**คำสำคัญ:** เยื่อบุโพรงมดลูกเจริญผิดที่, เอ็กซเรย์คอมพิวเตอร์, มะเร็งรังไข่

**Background and Objective:** Endometriosis is a common benign gynecologic disease in reproductive-aged women. The clinical manifestations of endometriosis are progressive dysmenorrhea, subfertility, and pelvic masses. Most endometriotic cysts are less than 12 cm. in diameter. We report an unusual case of an extremely large endometriotic cyst that gradually enlarged to near term gravid uterine size over the course of a year.

**Case report:** We report a 26-year-old female patient with a gradually enlarging pelvic mass and progressive dysmenorrhea. A whole abdominal CT scan was taken before the operative procedure, and it revealed an ovarian cancer-like complex mass that was 30 centimeters in diameter. The patient underwent exploratory laparotomy with right salpingo-oophorectomy and left ovarian cystectomy. The pathological diagnosis was bilateral endometriotic cysts.

**Conclusion:** As endometriotic cysts might manifest as ovarian cancer, they require careful management and long-term follow up at least 5 years. Moreover, intensive counseling about appropriate treatment is very important. Especially young patients, should not rush to decide on staging surgery based on the results of radiographic examination alone

**Keyword:** endometriotic cyst, CT image, ovarian cancer

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### Introduction

Endometriosis is a common benign gynecologic disease in reproductive women with an estimated prevalence of 10%.<sup>1,2</sup> The clinical presentations of endometriosis are progressive dysmenorrhea, subfertility and pelvic masses.<sup>3,4</sup> Endometriotic cysts are usually less than 12 cm. in diameter.<sup>5</sup> We report an unusual case of an extremely large endometriotic cyst that gradually enlarged to near term gravid uterine size over the course of a year.

### Case report

A nulliparous 26-year-old woman complained of having experienced three months of progressive dysmenorrhea. One year prior the visit, she was found to have an asymptomatic fist-sized pelvic mass. Over the course of a year, the mass gradually enlarged to just below the diaphragm. She also lost about 5 kg over three months. She had experienced menarche at 13 years of age and regular menstruation since. There was nothing notable in her family or medical history.

At her visit, she weighed 60 kg and was 160 cm tall. Her vital signs were normal. Her abdominal circumference was 95 cm. Physical examination palpable pelvic mass  $\frac{3}{4}$  above umbilicus and had a cystic to rubbery consistency. The mass was fixed as it was fitted in the abdomen. Rectovaginal examination

did not reveal any other abnormalities such as thickening of the recto vaginal septum or nodularity of the cul-de-sac.

Transabdominal ultrasonography revealed a solid cystic mass about 11x17 cm that arose from the pelvis with internal ground-glass hypoechogenicity, internal septation, 30% of which was solid. A whole abdominal CT scan was taken and investigated in order to evaluate the extent of the disease, and it revealed a well-circumscribed cystic mass with 18.5x10.0x15.6 cm and 5.5x5.7x5.6 cm enhanced internal septa arising from the right and left adnexal area, respectively. The uterus was normal in size and did not exhibit any structural abnormalities. The radiologic differential diagnosis was primary ovarian cancer and ovarian metastasis. There was no abdominal organ invasion or ascites, as shown in Figure 1. A blood test revealed slightly elevated CA-125(151.80 U/mL) levels, and CEA and CA 19-9 levels were 1.15 Nano gram/ml and <0.6 U/ml, respectively.

Laparotomy was performed through a low midline vertical skin incision. The operative findings revealed bilateral ovarian cysts which had accidentally ruptured and that had severe adhesions between them, large bowel and posterior uterine wall, caused the complete obliteration of the cul-de-sac and swelling of both ureters. The uterus, fallopian tubes, omentum, liver,



**Figure 1** The whole abdominal CT scan revealed well-circumscribed cystic mass with enhanced internal septa 18.5x10.0x15.6 cm and 5.5x5.7x5.6 cm arisen from the right and left adnexal area, respectively. The uterus was normal size without any structural abnormality. The radiologic differential diagnosis was primary ovarian cancer and ovarian metastasis. There were not any abdominal organ invasions or ascites.

and splenic and diaphragmatic surfaces were normal. The pelvic and para-aortic lymph nodes were not enlarged. Right salpingo-oophorectomy, left ovarian cystectomy, and adhesiolysis were performed. The right ovarian cyst was 30 cm in diameter with approximately 2,200 ml of chocolate and blood clot content and no solid parts. The left ovarian cyst was 5 cm in diameter with 20 ml of chocolate content. The patient experienced a total of 1000 ml. of blood loss.

There were no other intra- or post-operative complications. The patient was discharged three days after the operation. The pathological diagnosis was bilateral endometriotic cysts with right hydrosalpinx.

### Discussion

This case report demonstrates that endometriotic cysts can grow to the diaphragmatic level and present with constitutional symptoms and significant weight loss as though they were cancer. A previous study found a hazard ratio of 1.69 for ovarian cancer in patients diagnosed with endometriosis when compared with women with no evidence of endometriosis.<sup>6</sup> Endometriotic cysts are an important site of origin of some histologic subtypes of ovarian cancer such as clear cell, endometrioid, and low-grade serous.<sup>7</sup> The significant weight loss in our patient may have been the result of loss of appetite and abdominal pain caused by the mass.<sup>8</sup> In this case, pre-operatively diagnosing whether this was a benign or malignant tumor was difficult. The patient's significant weight loss, the presence of a solid component and bilateral ovarian cysts according to radiographic examination, and high Risk of Malignancy Index (RMI) score (455.4 IU/ml) led us to a diagnosis of ovarian malignancy. This is similar to the factors that led to the same diagnosis in a report by Bast et al.<sup>9</sup> According to some previous studies, other pre-operative evaluations that can be used to diagnose malignant transformation among women with endometriotic cysts of the ovaries are advanced age (over 40 years) at the time of ovarian endometrioma diagnosis and large endometrioma (over nine centimeters in diameter).<sup>10,11</sup>

Serum Carbohydrate Antigen 125 (CA-125) and Human Epididymis Protein 4 (HE4) were biomarkers which have been currently evaluated for diagnosing ovarian malignant tumors.<sup>12</sup> However, CA-125 levels seem to be elevated in endometrioma, HE4 levels appear to remain stable. In our patient had only

CA-125 due to HE4 not available in our hospital. Serum CA-125 was evaluated.

The age of patient is one of the important factors when considering treatment options. Moreover, in young patient who suspicious ovarian malignancy, intraoperative frozen section histological analysis may facilitate the appropriate selection of women requiring surgical staging.<sup>13</sup> We performed a right salpingo-oophorectomy and left ovarian cystectomy via laparotomy. Due to intraoperation the gross specimen look like benign disease, we did not performed frozen section histological analysis. The pathological diagnosis was bilateral endometriotic cysts with right hydrosalpinx. The operation we performed was similar to that performed by Ishikawa et al.<sup>14</sup> due to the young age of our patient. Shah et al.<sup>15</sup> and Matsushima et al. <sup>16</sup>, on the other hand, report performing radical surgery in a similar case due to the advanced age of their patient. The clinical manifestations in our case were not significantly different from those reported.

Oral et al.<sup>17</sup> and Saavalainen et al. <sup>18</sup> contend that, since there is a high risk of ovarian cancer among women with ovarian endometriosis, long-term follow-up at 3,6, and 12 months after surgery; and then yearly at least 5 years after surgery and cancer risk advisement is necessary in these cases.

Endometriotic cysts might manifest as ovarian cancer, and, thus, require careful management and long-term follow up at least 5 years after surgery. Moreover, intensive counseling about appropriate treatment is very important. Especially young patients, should not rush to decide on staging surgery based on the results of radiographic examination alone

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