

A Case of Large Extraovarian Endometriotic Cyst in Pelvis Mimicking Ovarian Cancer

Filiz ÇAYAN¹, Umut DİLEK¹, Leyla CİNEL², Gürkan YAZICI¹, Saffet DİLEK¹
Mersin-Turkey

Endometriosis is defined as an ectopic implantation of uterine mucosal tissue outside the uterine cavity, usually in the pelvis. The areas of the pelvis most frequently affected are the peritoneum, the ovaries, the pouch of Douglas and the uterosacral ligaments. In this paper, we report an extremely rare case with an extraovarian large endometriotic cyst originated from the peritoneum overlying the bladder. Endometriotic cyst should be kept in mind as a possible diagnosis in the presence of an extraovarian pelvic mass.

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Endometriosis is defined as the growth of endometrial glands and stroma outside the endometrium. It is a common gynecologic disorder, affecting 1-7% of the population, 21% of infertile women and 10% of 30-40-years old women.¹ Endometriosis most commonly affects the pelvic peritoneum close to the ovaries, including the uterosacral ligaments, the ovarian fossa peritoneum and the peritoneum of the cul-de-sac.² Extrapelvic disease occurs in %12 of patients with endometriosis.³

In this paper, we report a case with an extraovarian endometriosis which was in the form of a cystic mass in the pelvis. The case of a 34-year-old woman with a pelvic mass arising in the pelvic peritoneum above the bladder is presented.

Case Report

A 34-year-old woman, gravida 7, para 5, was referred to us for a second opinion on a pelvic mass. She had complained of lower abdominal pain and dysmenorrhea. Her menses were regular, and her last menstruation was two weeks before admission. Her past medical history was unremarkable.

On physical examination, she had a large mobile cystic mass anterior the uterus. Transvaginal ultrasonography demonstrated a hypoechoic cyst with intracystic vegetations and septas, compressing the uterus to posterior (Figure 1). Also there were ascite in the abdomen.

¹Department of Obstetrics and Gynecology, ²Department of Pathology
University of Mersin School of Medicine, Mersin, Turkey

Address of Correspondence

Filiz Çayan

Assistant Professor of
Obstetrics and Gynecology
University of Mersin School
of Medicine Department of
Obstetrics and Gynecology,
33079-Mersin, Turkey

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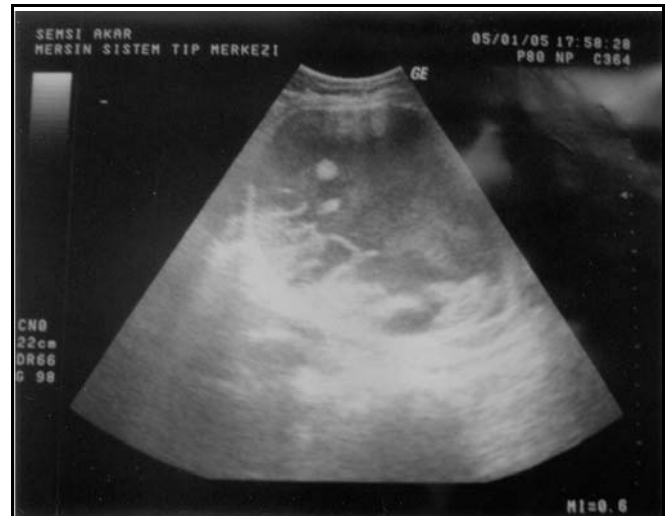


Figure 1. Transvaginal ultrasound image of the endometriosis cyst with papillary projections in the cyst wall.



Figure 2. Computerized tomography (CT) image of the case showing the cystic mass, measured 12.4x14 cm in diameter, with regular wall, containing fibillary vegetations.

She underwent computerized tomography (CT) of the abdomen, showing a mass 12.4x14 cm in diameter, localized

in the midline and upper side of the bladder, pushing the uterus to posteriorly. The cystic mass had regular wall, containing fibrillary vegetations (increased densities) and septas in the cyst (Fig. 2). The bladder wall had regular contour and no intravesical pathology was detected.



Figure 3. Macroscopic appearance of the cyst wall.

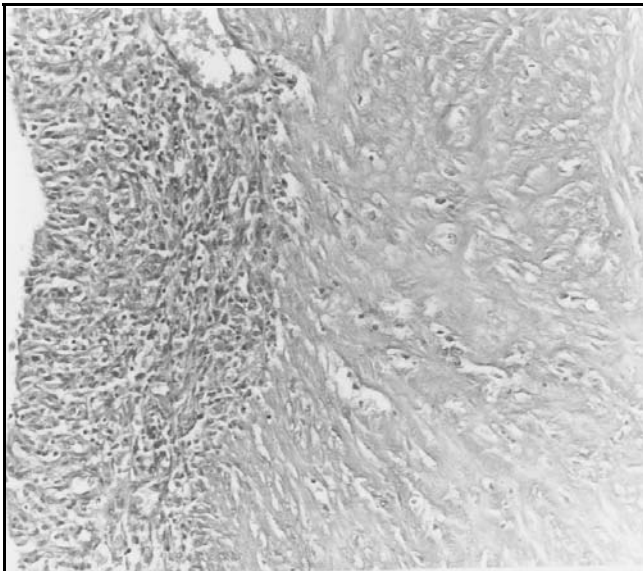


Figure 4. Endometriosis cyst lined by endometrial epithelium with adjacent stromal cells. H.E x200.

The serum CA-125 level was 272 U/mL (reference value: 0-35 U/mL), and other serum tumor markers were in normal level (CA15-3: 16 U/mL, CA 19-9: 4.5 U/mL, CEA: 0.6 ng/mL and μ FP: 1.5 IU/mL) (reference values are 0-25 U/mL, 0-27 U/mL, 0-3.4 ng/mL, 0-11.3 IU/mL, respectively).

Preoperatively, this suspicious pelvic mass was considered to be malignant. She underwent explorative laparotomy because of large size of the the cyst. During the exploration a cystic mass which attached to the bladder anteriorly was found. It was 13x14 cm in diameter and uterus was displaced posteriorly. It was separated easily from underlying pelvic peritoneum by blunt dissection. Grossly the cystic mass had dark-yellowish colour with intact regular

capsule (Figure 3). The uterus and both ovaries were normal and there were some endometriotic implant surface of pelvic peritoneum on exploration of the pelvis. The cystic mass was totally excised with intact capsule and cyst content was chocolate like. Intraoperative frozen section revealed this cystic mass and the ascite fluid as benign.

Pathologic evaluation of the surgically excised lesion revealed endometriosis cyst. Microscopically, the endometriosis cyst was lined by endometrial epithelium and stroma, hemorrhage, hemosiderin-laden macrophages and fibrosis were observed in the wall of the cyst wall (Figure 4).

Post-operatively, the patient was recovered with no complication and residual pain. One month after the operation, the serum CA-125 level declined to 22.3 U/mL, dramatically.

Discussion

Endometriosis is an oestrogen-dependent disorder that may result in substantial morbidity, including pelvic pain, repeated pelvic surgeries and infertility. Affected women have higher risk for development of ovarian cancer than the general female population, and they also may be at increased risk of breast and other cancers as well as autoimmune disorders.³

There are some principal theories regarding the pathogenesis of endometriosis: retrograde menstruation via the fallopian tubes; coelomic metaplasia; and vascular or lymphatic dissemination.⁴⁻⁷ Although compelling evidence exists for all these mechanisms in endometriosis, our case in the present study might support the both theories of retrograde menstruation and coelomic metaplasia. During the exploration, we found extensive endometriotic implant on the pelvic peritoneum, supporting retrograde menstruation theory in this case.

The women in this report, had no pelvic surgery previously that may have caused the mechanical transplantation of the peritoneal endometrial seeding and any pelvic trauma that may have caused a pelvic hematoma. So mechanical transplantation theory does not seem to be support this case.

Endometriosis has been reported in many organs including in intrapelvic and extrapelvic location. To our knowledge, this case might be interesting, because no extraovarian large endometriotic cyst in the pelvis has been reported previously in the literature.

Serum CA-125 concentration may be moderately elevated in several benign conditions, such as pelvic inflammatory disease, uterine fibroids, pregnancy and especially in endometriosis. However, serum CA-125 concentration is seldom more than 100 IU/mL in endometriosis, as seen in our case.

In conclusion, we did not recognize that the mass could be endometriosis cyst, until the surgical operation, this cyst was considered as malignant due to preoperative clinical and radiological findings. Endometriosis cyst should be considered as a possible diagnosis in the presence of an extraovarian pelvic mass. It is important for gynecologists and oncologists to be aware of this entity, because the presence of an extraovarian pelvic mass with an elevated serum CA-125 level suggests a malignancy, and the possibility of endometriosis is often overlooked.

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