A CASE OF PRIMARY RETROPERITONEAL MUCINOUS CYSTADENOCARCINOMA TREATED WITH FERTILITY-SPARING SURGERY

Dong-Hae Chung, MD¹, Seung-Ho Lee, MD²

Departments of ¹Pathology, ²Obstetrics and Gynecology, Gachon University Gil Medical Center, Incheon, Korea

Primary retroperitoneal mucinous cystadenocarcinoma is an extremely rare tumor. Preoperative diagnosis is very difficult and the treatment remains controversial. A 37-year-old Korean woman (gravida 0) presented with a huge abdominal mass. Computed tomography scan revealed an 18 × 11 cm sized unilocular cyst with irregular wall thickening and solid component at right adnexa. Serum CA 19-9 was slightly elevated (37.05 U/mL). At laparotomy, a huge right retroperitoneal cystic tumor originating from right paracolic gutter was found. Frozen section of the cystic tumor revealed a mucinous cystadenocarcinoma. Because the patient wished to remain fertile, fertility sparing surgery was performed. Microscopically, no evidence of metastasis was found and no further treatment was given. Six months after surgery, she has no evidence of recurrence. Fertility-sparing surgery should be considered for women with primary retroperitoneal mucinous cystadenocarcinoma, who wish to remain fertile.

Keywords: Cystadenocarcinoma, mucinous; Fertility; Retroperitoneal neoplasms

Case Report

A 37-year-old Korean woman (gravida 0) presented with a huge abdominal mass. The patient reported that she had had abdominal discomfort since 1 month ago and visited local clinic. On abdominal ultrasonography, a huge abdominal mass was detected and she was referred to department of gynecology. Her previous menstrual history was regular and past medical history was noncontributory. On physical examination, her abdomen was markedly distended. CT scan revealed an 18 × 21 cm sized unilocular cyst with irregular wall thickening and solid component at right adnexa (Fig. 1). Neither enlarged regional lymph node nor ascites was found. Hydronephrosis of right kidney and multiple uterine myomas were found. Laboratory analyses showed normal blood counts and nor-
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Normal serum value of CA-125. But, slightly elevated level of serum CA 19-9 was found (37.05 U/mL). Gastroscopy and colonoscopy showed no abnormality.

So, right ovarian neoplasm was suspected and an exploratory laparotomy was performed. A huge right retroperitoneal cystic tumor originating from right paracolic gutter was found. Although the tumor was close to the right ovary and appendix, there was no direct connection between them (Fig. 2). Small nodule was located in the right ovary and multiple uterine myomas were found. Left ovary and fallopian tube appeared normal. The cyst wall, having no apparent connection with any organs and showing no evidence of abdominal spread, was completely excised. Frozen section of the cystic tumor revealed a mucinous cystadenocarcinoma. Right salpingo-oophorectomy, washing cytology, myomectomy, lymphadenectomy, infracolic omentectomy, appendectomy and double J catheter insertion into right ureter were performed. The uterus and left ovary were preserved because the patient wished to remain fertile. Microscopically, no evidence of metastasis was found and no extracapsular invasion or vascular invasion was seen.

Following the surgery the patient recovered without any complication. She has been given no further treatment and 6 months after surgery, she has no evidence of recurrence.

1. Pathologic findings

Grossly, the mass was a well demarcated, unilocular, large cystic mass containing a mucinous fluid. The wall of the cyst was thick and pseudocapsule-like. The tumor was well demarcated from the surrounding tissue and showed no evidence of local invasion.

Fig. 1. Computed tomography scan. (A) Unilocular cyst with irregular wall thickening. (B) Solid component (arrow) in the cyst and hydronephosis of right kidney.

Fig. 2. Intraoperative photo showing the association of the tumor (T), appendix (A), and right ovary (RO). There was no direct connection between them.