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Case Report

Uterine Serous Adenocarcinoma in an Elderly Postmenopausal Woman: Clinically Misdiagnosed as Uterine Cervix Cancer

Jeong-A Hong[1], Tae-Hee Kim[1], Hae-Hyeog Lee[1], Soo-Ho Chung[1], Gyeong-Eun Heo[1], Dong-Su Jeon[1], Jeong Ja Kwak[2], Seung Do Choi[3], Eunkyung Han[4]

[1]Department of Obstetrics and Gynecology, [2]Department of Pathology, Soonchunhyang University College of Medicine, Bucheon, [3]Department of Obstetrics and Gynecology, Soonchunhyang University College of Medicine, Cheonan, [4]Department of Medicine, Soonchunhyang University, Asan, Korea

Uterine serous adenocarcinoma (USC) is rare and invasive cancer. This cancer is more often reported in the ovary, the fallopian tube, and the endometrium than uterine cervix. No matter where the tumor is located, the tumor exhibits similar histological characteristics. So when uterine cancer is proven to be serous adenocarcinoma, it is necessary to see if the tumor originated from ovary or endometrium and invaded the cervix. We report a case of a 73-year-old postmenopausal woman with USC arising near the internal os of endocervical canal, clinically misdiagnosed as uterine cervix cancer. **(J Menopausal Med 2015;21:171-174)**

Key Words: Cystadenocarcinoma serous, Tomography X-ray computed, Uterine cervical neoplasms, Uterus

Introduction

Uterine serous carcinoma (USC), also termed USC or uterine papillary serous carcinoma (UPSC), is a type of endometrial cancer which is rarely found among postmenopausal women.[1] It is usually diagnosed with endometrial biopsy from patients with postmenopausal uterine bleeding. Unlike low-grade endometrioid endometrial adenocarcinoma, USC is not an advanced disease from endometrial hyperplasia, nor an estrogen-dependent malignancy. It develops from atrophied endometrium, and is classified as type II endometrial cancer.[2,3]

Case Report

The 73-years old postmenopausal woman made a visit to a local clinic due to intermittent vaginal spotting for previous four months, to find out a huge pelvic mass on ultrasonogram. She had obstetrical history of three vaginal deliveries and one abortion. Her menopause was when forty-seven years old. She presented no other symptoms than vaginal bleeding. Laboratory findings are as follows; hemoglobin 12.0 g/dL, hematocrit 35.3%, leukocyte 7,460/mm^3, platelet 151,000/mm^3. There was no specific findings on liver function test, urinalysis, coagulation test, kidney function test, electrocardiogram, and chest X-ray. All the tumor markers we checked were within normal range; alpha-fetoprotein to be 2.1 ng/mL (normal range 0-7.5), carcinoembryonic antigen (CEA) to be 3.62 ng/mL (normal

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Address for Correspondence: Tae-Hee Kim, Department of Obstetrics and Gynecology, Soonchunhyang University Bucheon Hospital, 170 Jomaru-ro, Bucheon 14584, Korea
Tel: +82-32-621-5380, Fax: +82-2-6008-6874, E-mail: heeobgy@schmc.ac.kr

range 0-4.7), cancer antigen (CA) 19-9 23.2 U/mL to be (normal range 0-27), CA-125 16.9 U/mL to be (normal range 0-35), beta-human chorionic gonadotropin (β-HCG) 0.6 mIU/mL, and squamous cell carcinoma antigen (SCCA) to be 0.9 ng/mL (normal range 0.1-1.5). Papanicolaou test showed no abnormal cytology, and human papilloma virus (HPV) DNA chip test revealed no HPV infection. Pelvic ultrasonogram image showed pelvic cystic mass with septation (12.7 × 9.6 cm) (Fig. 1A). On abdominopelvic computed tomography images, there was another mass, other than the known cystic mass, which is thought to originate from either uterine cervical canal or endometrium (Fig. 1B).

We performed diagnostic laparoscopy prior to endometrial biopsy due to cervical stenosis. The large cystic mass on the right side with thin wall and lobulation inside was nothing other than a pseudocyst. The pseudocyst and adhered right adnexa was resected. Subsequently we performed incision of uterine fundus, and found out hematometra and endometrial mass originated near the endocervix (Fig. 1C). After washing out the blood fulfillment within the endometrium, we resected a mass sized about 2.5 × 1.5 cm originated near endocervical canal protruding into uterine cavity. A small portion of uterine fundus was taken for biopsy.

USC, high grade (G3) was found from the polypoid mass (Fig. 2A). There was paratubal cyst on the right adnexa, and no malignant cells within the aspiration fluid. Immunohistochemical stain results for tumor cells were as follows; WT1 (+), P53 (+), CK5/6 (-), P63 (-), P16 (+; focal) (Fig. 2B). Under the impression of endometrial cancer, we performed total abdominal hysterectomy, left salpingo-oophorectomy, right pelvic lymph node dissection, and partial omentectomy two weeks later. Specimen from secondary operation showed no evidence of residual tumor although almost all endometrium was embedded.

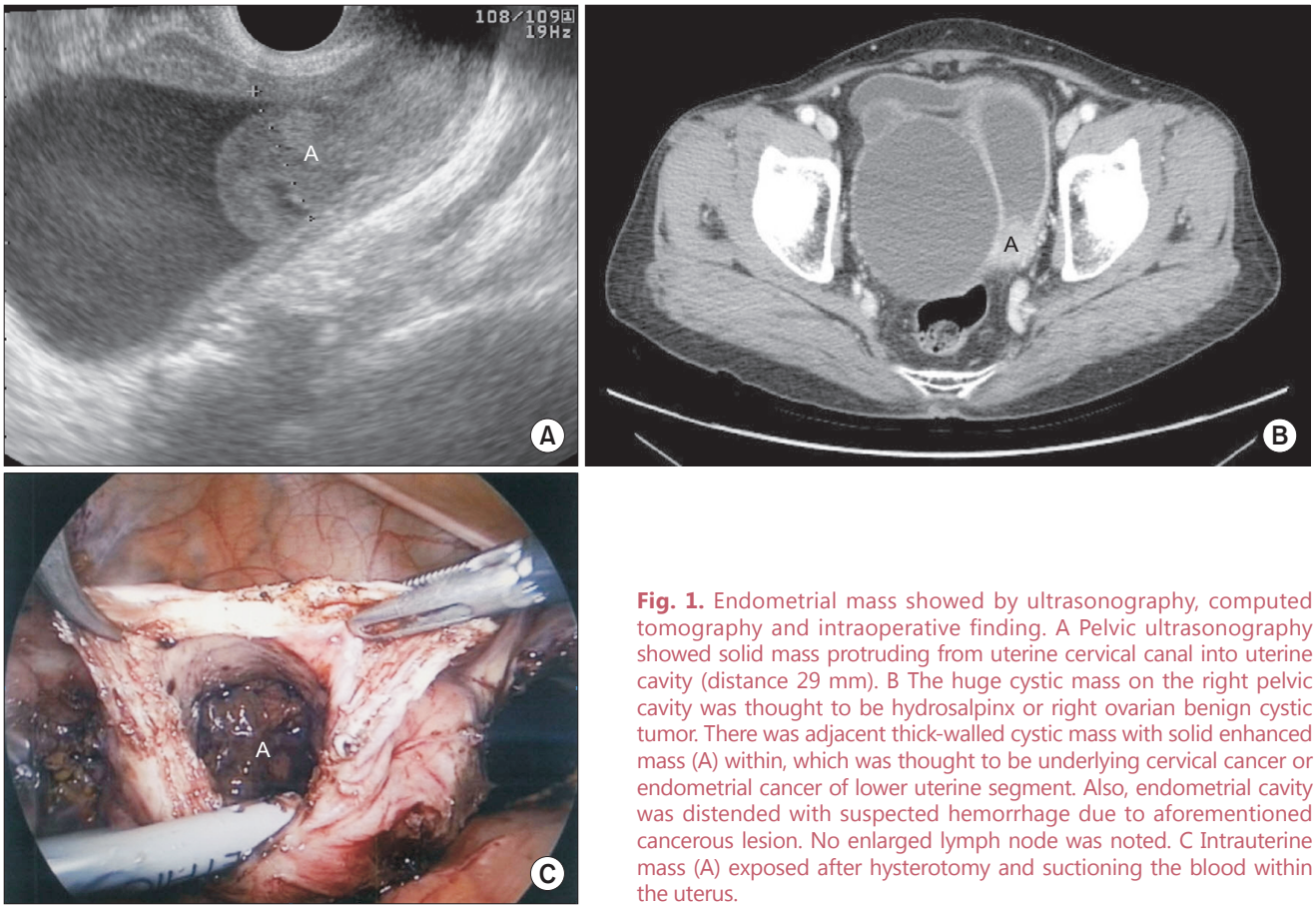

Fig. 1. Endometrial mass showed by ultrasonography, computed tomography and intraoperative finding. A Pelvic ultrasonography showed solid mass protruding from uterine cervical canal into uterine cavity (distance 29 mm). B The huge cystic mass on the right pelvic cavity was thought to be hydrosalpinx or right ovarian benign cystic tumor. There was adjacent thick-walled cystic mass with solid enhanced mass (A) within, which was thought to be underlying cervical cancer or endometrial cancer of lower uterine segment. Also, endometrial cavity was distended with suspected hemorrhage due to aforementioned cancerous lesion. No enlarged lymph node was noted. C Intrauterine mass (A) exposed after hysterotomy and suctioning the blood within the uterus.

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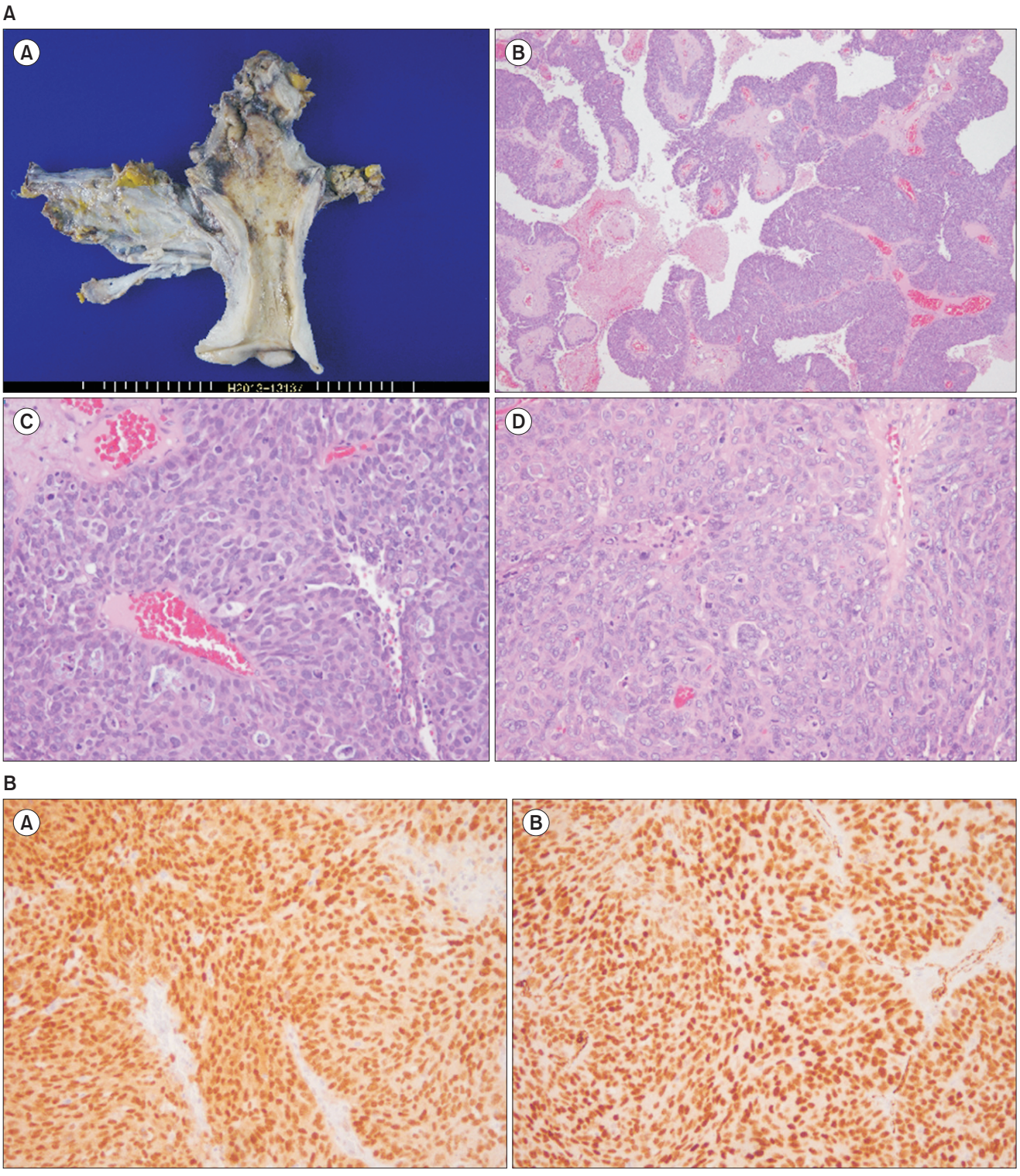

Fig. 2. Pathologic findings by hematoxylin & eosin (H & E) stain and immunohistochemistry. A Microscopic findings show large, broad, irregular papillae lined by cuboidal to irregularly stratified tumor cells with a high nuclear-cytoplasmic ratio and macronucleoli. (A) Hysterectomized uterus after polypectomy is grossly unremarkable. (B) Sections show several irregular neoplastic papillae with irregularly stratified tumor cells (H & E x40). (C) Tumor cells reveal severe nuclear atypia, frequent mitoses and apoptotic bodies (H & E x200). (D) Solid proliferation of tumor cells with pleomorphic nucleus is also noted (H & E x200). B The tumor cells reveal strong positivity in immunohistochemical stain of P53 and WT-1 and estrogen receptor. Immunohistochemical stain of CK5/6 was negative. Immunohistochemical stain of P53 (A) and WT-1 (B) show diffuse strong positivity in nucleus of tumor cells.

Discussion

Risk factors, markers and scoring systems associated with gynecological cancers are known, but it not easy to predict unusual cancers.[4~7] USC is an uncommon endometrial cancer and represents less than 10% of all endometrial cancers.[1] This case showed discordance between the clinical impression and pathologic results. The tumor mass was assumed to be located in the endocervical canal based on restricted visibility in operational filed due to hematometra and cervical stenosis. Because of the tumor, authors predicted uterine cervix cancer before pathologic results. The pathologic exam showed the mass to be endometrial origin. In the case like this, confirmation if it is endometrioid endocervical adenocarcinoma or endometrial adenocarcinoma is very important because these two malignancies have very different approach of diagnosis and treatment. Endometrioid-type cervical adenocarcinomas are rare tumors, although they have a better prognosis than adenocarcinomas of the usual endocervical type.[3] These types of carcinomas exhibits histologic characteristics that are identical to endometrial carcinoma, and the possibility of a primary endometrial adenocarcinoma with endocervical extension or drop metastasis should be excluded before making the diagnosis of a primary endocervical endometrioid adenocarcinoma. Other unsatisfactory clinical approach in this case was that we had designed the first surgery to just remove the mass and for symptom relief because of old age of the patient and negative result in Papanicolaou test and HPV DNA assay. This patient has survived 16 months with no evidence of recurrence until now.

Gynecologists should be careful not to underestimate disease in elderly postmenopausal women because of relatively poor general conditions and their atrophic changes of uterus and cervix due to aging process.

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Conflict of Interest

No potential conflict of interest relevant to this article was reported.

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