A Case of Multiple Primary Cancer with Cervical Adenocarcinoma and both Ovarian Endometrioid Adenocarcinoma

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A 49-year old woman visited Pusan National University Hospital with postcoital vaginal spotting and a palpable abdominal mass. Clinically, we suspected that she had barrel typed cervical cancer with ovarian cancer. After laparotomy, the histologic finding was multiple primary cancer with cervical adenocarcinoma and both ovarian endometrioid adenocarcinoma. Concurrent primary cervical adenocarcinoma and both endometrioid ovarian cancer has not been previously presented in the literature. Accordingly, we report upon a rare case of multiple primary cancer with a brief situations.

**Key Words**: Multiple primary cancer, Cervical cancer, Ovarian cancer

**INTRODUCTION**

Despite the developments of various treatment modalities, cervical cancer still causes significant problems, which have required our continued interest attention. Cervical tumors can be cured at the intraepithelial neoplasm stage, but at the invasive cancer stage, in spite of several treatment modalities, the cure rate decreases as the disease proceeds. Ovarian cancer is one of the most significant diseases in gynecology. The prognosis depends heavily on the surgical stage of the disease when it is discovered. At the time of diagnosis, the diseases are already advanced and has poor prognosis. The occurrence of concurrent primary cervical adenocarcinoma and ovarian endometrioid adenocarcinoma is extremely rare, and the possible reasons for the simultaneous occurrence of the two tumors in an individual are poorly defined.

We report upon a case of multiple primary cancer with cervical adenocarcinoma and both ovarian endometrioid adenocarcinoma with a brief situations.

**CASE REPORT**

A 49-year old unmarried woman visited our hospital with postcoital vaginal spotting and a palpable abdominal mass. She had menarche at the age of 16 and an irregular menstruation interval and first coitus at the age of 18.
Her obstetrical history was gravida 6, para 0, artificial abortion 6, living birth 0. Her mother died due to diabetes and hypertension and her two sisters were healthy. On pelvic examination, the cervix was of the barrel type, approximately 7 cm in diameter, and there was an ulcerative lesion at the posterior cervical lip, involving the upper vaginal wall. We suspected stage IIa cervical cancer clinically. The huge pelvic mass was palpated which was the cystic nature with irregular surface and showed poor mobility. Cervical punch biopsy revealed adenocarcinoma and pelvic magnetic resonance imaging suggested malignancy of both ovaries (Fig. 1). Laboratory findings were within normal limits except for elevated CA-125 (123.2 U/mL). Breast, colon and chest studies showed normal findings. During laparotomy, both irregular ovarian masses, each of size 21.0×11.0×16.0 cm on the right side and 3.0×4.0×3.0 cm on the left side, were visualized in the abdominal cavity which was filled with serosanguineous ascitic fluid. The right ovarian mass presented as malignant epithelial cancer on frozen biopsy. Total abdominal hysterectomy, bilateral salpingo-oophorectomy, pelvic lymph node dissection with infracolic omentectomy and ovarian cancer staging were performed. The final histologic finding was of cervical adenocarcinoma (Fig. 2) and ovarian endometrioid adenocarcinoma (Fig. 3). Radical hysterectomy was impossible due to the condition of the barrel typed cervix. After the operation, chemotherapy with cisplatin and paclitaxel and pelvic irradiation was done. 24 months later, the patient died of complications related to recurrent cervical cancer.

Fig. 2. Sections from the uterine cervix showing atypical glands lined with anaplastic epithelial cells (H&E stain, × 100).

Fig. 3. Sections from ovary showing anaplastic glands with central necrosis in the fibrotic stroma (H&E stain, × 100).

DISCUSSION

Synchronous tumors are defined as those occurring within 6 weeks before or after the diagnosis of a primary tumor. The most common synchronous tumor in gynecologic tumors is of the endometrium and the ovary. Common sites of synchronous tumor in ovarian cancer
are the breast, endometrium, skin, colon, uterine cervix and the bronchus, in order of frequency. Concurrent tumor of the ovary and cervix arises in 5 out of 1426 ovarian cancer patients.³

Secondary hematologic malignancy after the administration of an alkylating agent (Melphalan) for the treatment of ovarian cancer is well established. Einhorn, et al. evaluated the role of chemotherapy in the development of second malignancies and found that among 110 ovarian cancer patients, 55 patients received Melphalan treatment and the other 55 no chemotherapy, the groups respectively develop 17 and 5 second tumor patients (P=0.017).⁴

Since most ovarian cancers are usually discovered in the later stages, a long latency is expected before an unrecognized tumor at laparotomy becomes clinically obvious. Thus, until it becomes clinically obvious at a late stage, we recommend that the physician should be aware of the possibility of the synchronous or metachronous, or secondary ovarian tumor during the course of the initial and follow-up evaluations.⁵

In this case, the patient revealed typical symptoms of two tumors as a palpable abdominal mass and postcoital vaginal spotting. The treatments applied in this case involved total abdominal hysterectomy, bilateral salpingo-oophorectomy and pelvic lymph node dissection with infracolic omentectomy. Radical hysterectomy was impossible due to the condition of the barrel type cervix. After the operation, chemotherapy with cisplatin and paclitaxel and pelvic irradiation was done adjuvantly. 24 months later, the patient died of complications related to recurrent cervical cancer.

Concurrent primary cervical adenocarcinoma and both endometrioid ovarian cancer has not been previously presented in the literature. Accordingly, we report upon a rare case of concurrent cervical adenocarcinoma and ovarian endometrioid adenocarcinoma of both ovaries with its management and natural history.

REFERENCES


국문초록

저공경부암과 난소종양을 동시에 가지고 있는 여성이 성교 후 질 출혈과 복강내 종물 때문에 부산대학교병원 산부인과를 내원하였다. 개복수술 후 병리조직 검사에서 자궁경부의 선암과 동시에 양측 난소의 자궁내막양 선암을 가진 다발성 원발암으로 확인되었다. 자궁경부의 선암과 동시에 양측 난소의 자궁내막양 선암을 가진 다발성 원발암은 아직까지 문헌 보고된 예가 없어 저자의 1예를 간단한 문헌 고찰과 함께 보고하는 바이다.

중심단어 : 다발성 원발암, 자궁경부암, 난소암