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Case Report

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# A rare case of synchronous genital carcinoma involving endometrium and unilateral fallopian tube in a 24 years old patient

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**Abstract**
Multifocal synchronous development of malignancies of the female genital tract is a rare occurrence and less than 3% of primary malignancies of this region is synchronous. Although the simultaneous presentation of endometrial and ovarian carcinoma of the endometrioid type is well described little is known about a similar phenomenon involving the endometrium and fallopian tube. The relationship between the synchronous tumours is uncertain. More illuminating studies are being conducted on the relationship between synchronized endometrial and ovarian carcinomas in recent studies.This case is about synchronous genital carcinoma involving endometrium and unilateral fallopian tube in a 24 years old patient.

**Keywords:** synchronous tumors, endometrioid carcinoma, endometrial carcinoma, fallopian tube carcinoma

## 1. Introduction

Multifocal synchronous development of malignancies of the female genital tract is a rare occurrence and less than 3% of primary malignancies of this region is synchronous. Although the simultaneous presentation of endometrial and ovarian carcinoma of the endometrioid type is well described little is known about a similar phenomenon involving the endometrium and fallopian tube (1, 2).

## 2. Case Report

A 24 years old virgin patient was referred to us with abnormal uterine bleeding, anemia and a possible diagnosis of uterine fibroid. Her body-mass index was 21.1 kg/m2. Her personal history was unremarkable. Family history was negative for malignancies. Detailed systemic examination revealed no abnormalities. There was no palpable mass in abdominopelvic examination. In her initial transabdominal ultrasonography, 8 mm of endometrial thickness along with a 42x38 mm of heterogeneous solid mass image in the posterior uterine wall was observed. MRI scan revealed a 50x24 mm mass in endometrium without any other significant pathology in the abdomen. Tumor markers were also within the normal range. Initially a myomectomy was performed, and pathology result was reported as endometrial adenocarcinoma, endometrioid type Grade 2 (FIGO), afterwards total laparoscopic surgical staging was performed, and final pathology report revealed a synchronous grade 2 endometrioid adenocarcinoma of uterus and an intraepithelial carcinoma of the right fallopian tube without any implants in the abdomen or on the surface of tubes with no sign of disease in omentum and peritoneal lavage and samplings. All paraaortic and pelvic lymph nodes were negative with no lymphovascular invasion. Cervix was free of tumor, but myometrium was found to be more than ½ infiltrated with serosal surfaces intact. Case was discussed with pathology and decided as a synchronous genital malignancy of the endometrium and right fallopian tube (Fig. 1).

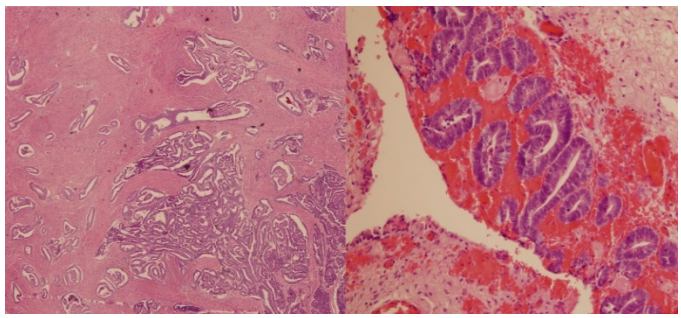

**Fig. 1.** Endometrioid adenocarcinoma (endometrium and fallopian tube)

## 3. Discussion

Surgical staging is the fundamental method for treatment of synchronous malignancies, but it must first be proved whether it is a primary or a metastatic tumour with pathological examination criteria described by Ulbright and Roth in the first place. Distinguishing an independent primary carcinoma from metastasis is mandatory since each situation means different prognosis and requires different management (1-3).

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Patients with synchronous malignancies have a better outcome than those with metastatic disease in the same organs (4, 5). Genetic transition must also be considered in synchronous malignancies especially mutations in BRCA-1 and BRCA-2 genes are regarded as improved risk factors for fallopian tubes and ovaries along with Lynch syndrome which should also be considered because of the risk for ovarian malignancy due to mutation in the mismatch-repair genes (6, 7).

Synchronous malignancies of the genital tract are extremely rare and concerning the age of the patient, her low BMI and negative family history our initial risk assessment for endometrial cancer was low leading us to a diagnosis of uterine fibroid due to abnormal vaginal bleeding and initial imaging. Concerning moral values in conservative societies, one should not hesitate in early surgical intervention primarily with endometrial sampling in persistent abnormal uterine bleeding, even if the patient is young and virgin.

**Conflict of interest**

None the declare.

**Acknowledgments**

None the declare.

**References**

**1.** Swarup A, Manjunath R, Sudha H. A Rare Case of Synchronous Genital Carcinoma Involving the Endocervix and Bilateral Fallopian Tubes. J South Asian Feder Obs Gynae 2011; 3 (2):106-108.

**2.** Kan O, Alkilic A, Turgay B, Gemici A, Atabekoglu CS. Triple Synchronous Malignancies in Genital Tract; Primary Endometrial, Ovarian and Fallopian Tube Carcinoma: A Case Report. Journal of Clinical and Diagnostic Research: JCDR. 2017;11(1): QD01-QD02. doi:10.7860/JCDR/2017/22003.9138.

**3.** Ulbright T, Roth L. Metastatic and independent cancers of the endometrium and ovary: A clinicopathologic study of 34 cases. Hum Pathol. 1985; 16:28-34.

**4.** Williams MG, Bandera EV, Demissie K, Rodríguez-Rodríguez L. Synchronous primary ovarian and endometrial cancers: A population-based assessment of survival. Obstet Gynaecol. 2009;113(4):783-89.

**5.** Chiang YC, Chen CA, Huang CY, Hsieh CY, Cheng WF. Synchronous primary cancers of the endometrium and ovary. Int J Gynaecol Cancer. 2008; 18:159–64.

**6.** Chen S, Parmigiani G. Meta-analysis of BRCA1 and BRCA2 penetrance. J Clin Oncol. 2007;25(11):1329-33.

**7.** Dunlop MG, Farrington SM, Carothers AD, Wyllie AH, Sharp L, Burn J, et al.Cancer risk associated with germline DNA mismatch repair gene mutations. Hum Mol Genet. 1997; 10:105–1.