

# SENKRONİZE ÜÇLÜ PRİMER SERVİKS, ENDOMETRİYUM VE TUBA KANSERİ: OLGU SUNUMU

## TRIPLE SYNCHRONOUS PRIMARY CERVICAL, ENDOMETRIAL AND FALLOPIAN CANCER: A CASE REPORT

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### ÖZET

Senkron multipl orijinli jinekolojik kanser görülmesi oldukça nadirdir ve literatürde kısıtlı sayıda vaka yayımlanmıştır. Elli bir yaşında servikal Papanicolaou test sonucu 'atipik glandüler hücreler' ve endometriyal biyopsi sonucu 'endometrial adenokarsinom' olan hastaya tip 3 total abdominal histerektomi, bilateral salpingooferektomi, infrakolik omentektomi, komplet pelvik-paraaortik lenf nodu diseksiyonu ve appendektomi uygulandı. Nihai patoloji primer serviks, endometriyum ve tubal karsinom olarak izlendi.

**Anahtar Kelimeler:** Senkron; Primer üçlü kanser

### ABSTRACT

Occurrence of synchronous triple primary gynecological cancers is extremely rare, only few cases has been reported. Fifty one years old patient had 'atypical glandular cells' at cervical Papanicolaou test and 'endometrial adenocarcinoma' at endometrial sampling and was performed Type 3 total abdominal hysterectomy, bilateral salpingoopherectomy, infracolic omentectomy, complete pelvic-paraaortic lymphadenectomy and appendectomy. Final pathologies were concomitant primary cervical, endometrial and fallopian cancer.

**Key Words:** Synchronous; Primary, triple carcinoma

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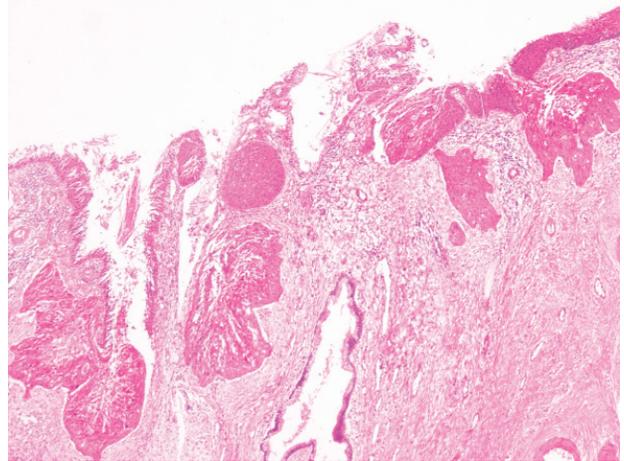
## INTRODUCTION

Synchronous tumors are defined as two or more tumors occurring in a patient simultaneously (1). Synchronous multiple primary tumors of the female genital tract are well-known phenomenon, comprising only 1% to 6% of all genital tract neoplasms (2). Occurrence of synchronous triple primary gynecological cancers is extremely rare, only few cases has been reported.

In this report, we present the clinical and pathological findings of a 51 year-old patient with concomitant cervical, endometrial and fallopian cancer. To our knowledge, the presented patient is the first case of triple synchronous cervical, endometrial and fallopian cancers and fourth case of multiple primary synchronous carcinoma including fallopian tube

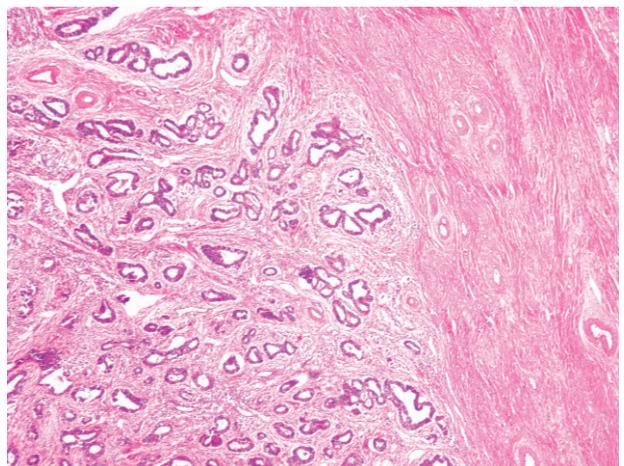
## CASE REPORT

A 51-year-old, gravida 4, parity 3 woman was admitted to the Obstetrics and Gynecology clinic with a complaint of abdominal distention which has been ongoing for approximately two years. Bilaterally tubal ligation for contraception and fluoxetine medication for restless leg syndrome was prominent specialities at previous medical history and her aunt had suffered from gynecological neoplasia. Her physical examination revealed blood pressure 110/60 mmHg, heart rate 78/min, respiratory rate 18/min, body temperature 36.8°C. Distention or tenderness couldn't find at abdominal examination. Hypertrophic and fixed cervix was palpated during pelvic examination. Transvaginal ultrasonography showed 80x60x52mm sized uterus and irregular, thick and heterogeneous endometrium. The appearance of ovaries were bilaterally normally. There was no significant ascites. Complete blood count, biochemistry, coagulation parameters, and urinalysis were all within the normal range. The tumor marker CA-125 was 18U/ml. A cervical Papanicolaou test taken at admission revealed 'atypical glandular cells'. Due to irregular, thick and heterogeneous endometrium, a diagnostic endometrial biopsy was performed, and notified 'endometrial adenocarcinoma'. Wide and irregular endometrium, heterogeneous and large cervix were noted at computed tomography. The preoperative diagnosis was endometrial carcinoma with cervical extension. Elective explorative laparotomy was performed following a midline vertical incision for definitive surgical treatment of pathology. Operative findings revealed no ascitic fluid. but tumoral implants were seen over uterine serosa, omentum, appendix and pelvic peritoneum. Type 3 total abdominal hysterectomy, bilateral salpingoopherectomy, infracolic omentectomy, complete pelvic-paraaortic lymphadenectomy and appendectomy were performed.

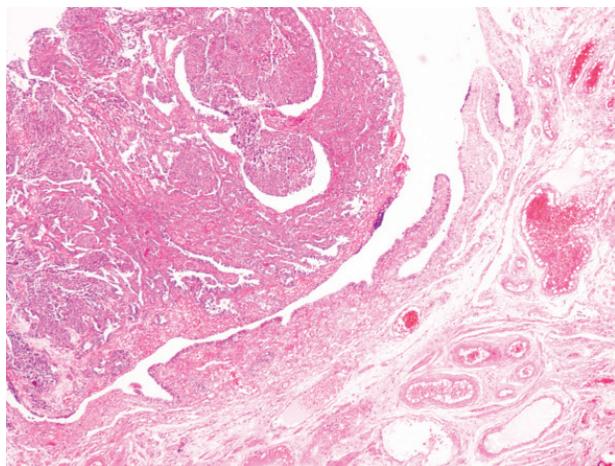


**Figure 1** • Microinvasive squamous cell carcinoma of cervix (H&E; x40).

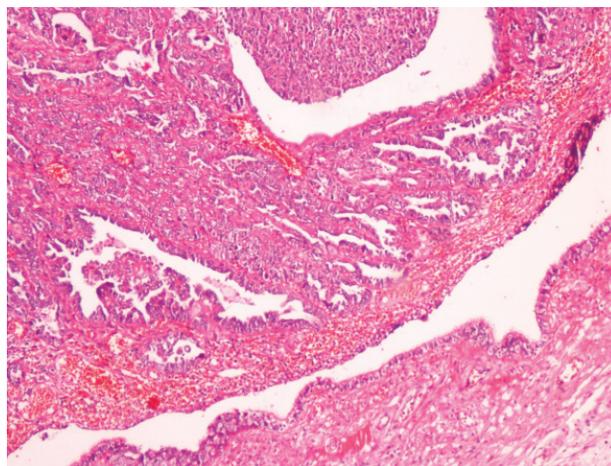
On gross examination the surgical specimen the size of the uterus was 10,5x6,5x3cm. In the opening of the uterus cervix was multiparous and macroscopically there wasn't any lesion. There was 3x1.5cm sized irregular lesion with necrotic areas in isthmus and 1.5x0.7x0.5cm sized necrotic lesion in fundus. In myometrium there was a 0.8cm diameter leiomyoma. In the right tuba uterina 1cm diameter hemorrhagic lesion was seen. On the histopathologic examination the final diagnosis is microinvasive squamous cell carcinoma (Figure 1) with vertical invasion depth 3 mm and horizontal spread of 5mm in cervix, FIGO grade 2 endometrioid type endometrial carcinoma in endometrium (Figure 2) and Silverberg grade 3 serous adenocarcinoma in the right tuba uterina (Figure 3, 4). In situ carcinoma was seen at adjacent tumoral lesion, in the right tuba uterina. Serous adenocarcinoma metastasis was seen in serosa of appendix, omentum and each



**Figure 2** • Endometrioid type of endometrial carcinoma (H&E; x40).



**Figure 3** • Serous adenocarcinoma of tuba uterina (H&E; x40).



**Figure 4** • Serous adenocarcinoma of tuba uterina (H&E; x100)

external iliac lymph nodes. Bilaterally ovaries, parametrium and serosa of uterus were also involved.

Postoperatively any medical or surgical complication has occurred and she received six courses of paclitaxel and carboplatin due to pathologic findings. She is now at 21th month of operation and any recurrence, relaps or another problem has occurred.

## DISCUSSION

Synchronous tumors are defined as two or more tumors occurring in a patient simultaneously (1). Synchronous carcinoma of ovary and endometrium is the most common with an incidence of 10% of the patients with ovarian cancer (3). The occurrence of synchronous multiple primary gynecological cancers is extremely rare, only few cases has been reported. (4-6)

It is important to distinguish multiple primaries from metastatic lesions because they carry a different prognosis. For accurate differentiation of these three distinct cancers, several clinicopathologic criteria have been proposed. The criteria of identification of the synchronous primary cancers include either different histologic types (major criterion) or all of the following minor criteria: both tumors confined to primary sites, no direct extension between tumors, no lymphovascular tumor emboli, no or only superficial invasion and distant metastasis (7,8). The final diagnosis of patient is microinvasive squamous cell carcinoma of cervix, endometrioid type endometrial carcinoma in endometrium and serous adenocarcinoma in the right tuba uterina. Identification of the different histologic types (squamous, endometrioid, serous) confirmed that both tumors was confined to primary sites. No direct tumoral extension, no lymphovascular tumor emboli, no

superficial invasion and no distant metastasis proved us the primarity of all tumors

Most patients had early-stage and low-grade disease. Stage I disease was observed in 68.1% of patients with ovarian cancer. Patients with synchronous ovarian and endometrial cancer had a 73.3% 5-year survival rate, suggesting a favorable prognosis(9) cervical carcinoma was stage 1B, endometrial carcinoma was 1A and suggesting good prognosis but fallopian tube carcinom was stage 3C, ominously.

While the discussions are going on about etiology of this phenomenon, it has been postulated that tissues of a common embryologic origin when simultaneously exposed to certain carcinogens may develop synchronous neoplasms (10). Another suggestion says that the extended müllerian system, comprising the ovarian epithelium, fallopian tube, uterine corpus, and cervix, may respond as a single morphologic unit to produce primary carcinomas in multiple sites (11,12). Others suggest that these neoplasms originate in metaplasia occurring in histologically similar epithelium of the genital tract and peritoneum (9). Soliman et al found that young age, obesity, premenopausal status, and nulliparity were the distinct clinical characteristics of the women with synchronous primary cancers of the endometrium and ovary, and authors suggested that a hormonal field effect might account for the development of the simultaneous endometrioid cancers (13).

Fluoxetine medication was prominent specialities at previous medical history. Fluoxetine, a member of the class of selective serotonin reuptake inhibitors, is a potent antidepressant commonly used in clinical practice and also an inhibitor of isoenzyme CYP 2D6. Liao S report that fluoxetine leads to a dramatic increase in melanin production in normal human melanocytes

(14) Treeck O highlights a close interaction between melatonin and estrogen receptor signaling.(15) Although Watanabe M (16) demonstrates cytostatic effect of melatonin in estrogen receptor-positive endometrial cancer cell line, an agent like fluoxetine may act as trigger for multifactorial (hormonally and metabolic) response direct or indirectly, including all background of suggestions described below, causing multiple primary tumors related to receptivity and post-receptor activity pathways of different cell types.

## REFERENCES

1. Ree YS, Cho SH, Kim SR, Kim KT, Park MH. Synchronous primary endometrial and ovarian cancer with three different histologic patterns: a case report. *Int J Gynecol Cancer* 2003. 13:678–682.
2. Eisner RF, Nieberg RK, Berek JS. Synchronous primary neoplasms of the female reproductive tract. *Gynecol Oncol* 1989. 33:335–339.
3. Zaino R, Whitney C, Brady MF, DeGeest K, Burger RA, Buller RE. Simultaneously detected endometrial and ovarian carcinomas—a prospective clinicopathologic study of 74 cases: a gynecologic oncology group study. *Gynecol Oncol* 2001. 83:355–362.
4. Phupong V. Triple synchronous primary cervical, endometrial and ovarian cancer with four different histologic patterns *Arch Gynecol Obstet* 2007. 276:655–658.
5. Saglam A. Four synchronous female genital malignancies: the ovary, cervix, endometrium and fallopian tube *Arch Gynecol Obstet* 2008. 277:557–562.
6. Atasever et al Synchronous Primary Carcinoma in 5 Different Organs of a Female Genital Tract An Unusual Case and Review of the Literature *International Journal of Gynecological Cancer & Volume 19, Number 4, May 2009.*
7. Eifel P, Hendrickson M, Ross J, Ballon S, Martinez A, Kempson R. Simultaneous presentation of carcinoma involving the ovary and the uterine corpus. *Cancer* 1982;50:163–170.
8. Ulbright TM, Roth LM. Metastatic and independent cancers of the endometrium and ovary: a clinicopathologic study of 34 cases. *Hum Pathol* 1985;16:28–34.
9. Ayhan A, Yalçin OT, Tuncer ZS, Gürkan T, Küçükali T Synchronous primary malignancies of the female genital tract *Eur J Obstet Gynecol Reprod Biol.* 1992 Jun 16;45(1):63-6.
10. Woodruff JD, Solomon D, Sullivan H. Multifocal diseases in the upper genital canal. *Obstet Gynecol* 1985. 65:695–698.
11. Eifel P, Hendrickson M, Ross J, et al. Simultaneous presentation of carcinoma involving the ovary and the uterine corpus. *Cancer.* 1982;50:163Y170.
12. Woodruff JD, Julian CG. Multiple malignancy in the upper genital tract. *Am J Obstet Gynecol.* 1993;43:305-312.
13. Soliman PT, Slomovitz BM, Broaddus RR, et al. Synchronous primary cancers of the endometrium and ovary: a single institution review of 84 cases [review]. *Gynecol Oncol.* 2004;94:456Y462.
14. Liao S, Shang J, Tian X, Fan X, Shi X, Pei S, Wang Q, Yu B. Up-regulation of melanin synthesis by the antidepressant fluoxetine. *Exp Dermatol.* 2012 Aug;21(8):635-7.
15. Treeck O, Haldar C, Ortmann O. Antiestrogens modulate MT1 melatonin receptor expression in breast and ovarian cancer cell lines. *Oncol Rep.* 2006 Jan;15(1):231-5.
16. Watanabe M, Kobayashi Y, Takahashi N, Kiguchi K, Ishizuka B. Expression of melatonin receptor (MT1) and interaction between melatonin and estrogen in endometrial cancer cell line. *J Obstet Gynaecol Res.* 2008 Aug;34(4):567-73.