

# A Rare Case of Synchronous Genital Carcinoma Involving the Endocervix and Bilateral Fallopian Tubes

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## ABSTRACT

A 53-year-old postmenopausal woman came with profuse watery discharge per vagina and underwent type III radical hysterectomy with pelvic lymph node dissection, as the biopsy from the cervical growth revealed papillary adenocarcinoma. She also received adjuvant combination chemotherapy as it was opined as synchronous genital carcinoma involving the endocervix and bilateral fallopian tubes, which is a rare and unique condition. Patient is on regular follow-up with no evidence of recurrent disease.

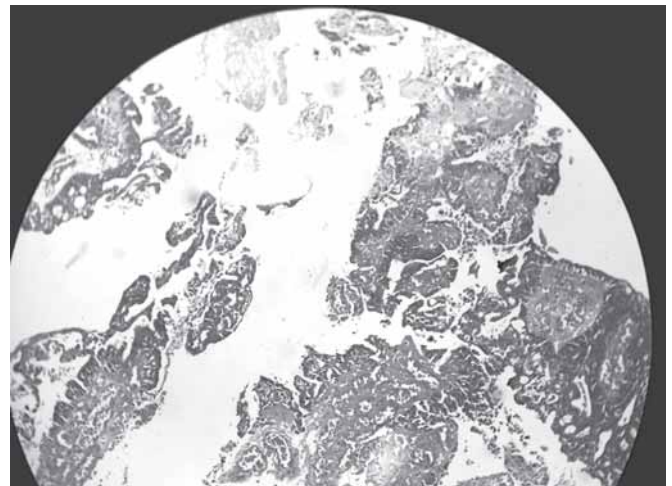
**Keywords:** Synchronous, Endocervix, Fallopian tubes.

## INTRODUCTION

Multifocal synchronous development of malignancies of the female genital tract is uncommon contributing to less than 3% of primary malignancies of this area. It has been postulated that embryologically similar tissues may be subjected to the same carcinogenic or hormonal stimuli and thereby develop synchronous neoplasm.<sup>1</sup> We present a rare case of a 53-year-old postmenopausal woman operated by radical hysterectomy for endocervical carcinoma. Fallopian tubes on both sides also showed papillary tumor within its lumen, thereby manifesting as synchronous trifocal mucinous papillary adenocarcinoma involving endocervix and both fallopian tubes.

## CASE REPORT

A 53-year-old postmenopausal multiparous woman presented to us in November 2008, with a complaint of foul smelling watery discharge per vagina since 2 years. There were no other symptoms. Family history was negative for malignancies. GPE was normal. Detailed systemic examination revealed no abnormalities. Per abdominal examination was unremarkable with no mass or organomegaly. Per speculum examination showed a healthy vagina and a small growth of 0.5 cm on the posterior lip of the cervix with serosanguineous foul-smelling discharge. Biopsy of the cervical growth was taken which revealed papillary adenocarcinoma (Fig. 1). Rectovaginal examination revealed a growth confined to the cervix with no parametrial infiltration. Routine investigations were within normal limit. Ultrasound pelvis revealed a hypoechoic lesion in the cervix. Patient underwent type III radical hysterectomy with PLND.

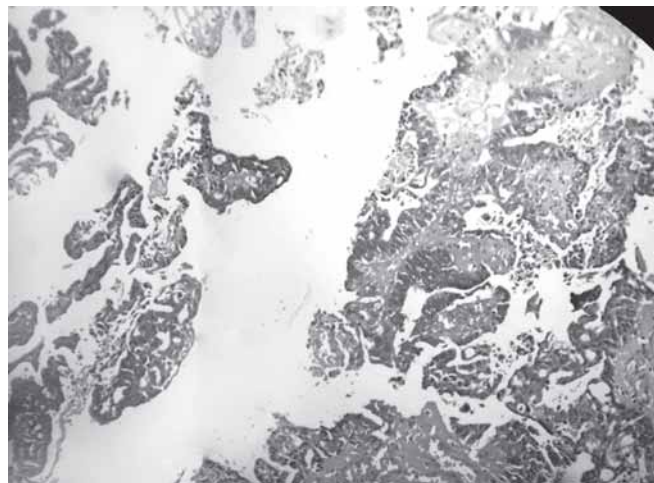


**Fig. 1:** Photomicrograph of endocervical papillary adenocarcinoma

On laparotomy, bilateral fallopian tubes were dilated and tortuous. Uterus and bilateral ovaries were grossly normal. Cut surface of the uterus and cervix showed no obvious growth in ecto/endocervix (Fig. 2). Cut surface of bilateral fallopian tubes revealed gray white friable, papillary growth at places attached to the wall. The fimbrial ends were closed on both sides (Fig. 3). Cut sections from fallopian tubes revealed serous papillary adenocarcinoma, tumor confined to mucosa and submucosa (Figs 4 and 5). There was no residual tumor in the cervix. All the lymph nodes showed reactive hyperplasia. There was no lymphatic or vascular permeation. Final FIGO staging for the cervix was stage IA<sub>1</sub> and fallopian tubes as IB. Case was discussed with pathologist and opined as synchronous genital malignancy of the endocervix and bilateral fallopian tubes.



**Fig. 2:** Cut section of the uterus and cervix with bilateral fallopian tubes



**Fig. 5:** Photomicrograph of high power view of fallopian tube papillary adenocarcinoma



**Fig. 3:** Cut section of the uterus and cervix with bilateral fallopian tubes showing intraluminal tumor with papillary projections



**Fig. 4:** Photomicrograph of low power view of fallopian tube papillary adenocarcinoma

## DISCUSSION

Primary adenocarcinoma of the endocervix constitutes nearly 1.1% of all invasive gynecological malignancies. Primary

fallopian tube carcinoma comprises approximately 0.31 to 1.11% of cancers of the female genital tract with bilateral involvement occurring in about 20% of the cases.<sup>2</sup> Adenocarcinoma is the most common primary tubal malignancy accounting for more than 90%, and they are frequently involved from other primary sites, like the ovaries, endometrium, GI tract, breast or from primary peritoneal carcinomatosis. Clinically, tubal carcinoma closely resembles ovarian carcinoma and is treated as such and is rarely diagnosed preoperatively.<sup>3</sup> Extremely rare is an association of endocervical adenocarcinoma and bilateral fallopian tube adenocarcinoma. One of the reasons for its rarity of occurrence is that primary tubal and endocervical malignancies share no known epidemiological risk factors.<sup>2</sup>

Synchronous carcinomas involving one or both ovaries and endometrium are the most common sites involved accounting for more than 50%. Other less common combinations include cervix and vagina or vulva, ovaries and fallopian tubes, ovaries and endocervix.<sup>2</sup> Most common association of fallopian tube tumors is with endometrium, although there have also been reported cases of fallopian tube and synchronous breast cancer.<sup>4</sup> Rarely, triple and quadruple synchronous malignancies are reported. Only a single case of multifocal tumorigenesis involving ovary, fallopian tube, endometrium, endocervix and vagina has been reported.<sup>5</sup>

Multiple primary malignant neoplasms in a single patient have been documented in the literature over the past 100 years and they were first described by Billroth in 1889. Majority of them being metachronous, synchronous lesions are less frequent. Distinguishing independent primary carcinoma from metastasis is very important because each situation carries a different prognosis and also for clinical management of individual patient. Several guidelines have been established to resolve the controversy of multifocality vs metastases.<sup>2</sup> When compared with patients having metastatic lesions, synchronous female malignancies are usually in early stage and of low grade with a more favorable diagnosis.<sup>5</sup>

Based on our data, it is important to examine in detail the adnexa in all hysterectomy specimens.<sup>1</sup> With widespread use of transvaginal sonography, more cases of fallopian tube carcinoma may be discovered preoperatively, allowing better chances for treatment.<sup>6</sup> Though synchronous carcinoma of the endocervix and fallopian tubes is rare, we need to keep in mind the pathology of fallopian tube when a patient comes with persistent watery discharge per vagina of unknown cause, which is rare but pathognomonic symptoms occurring only in 9% of fallopian tube carcinomas.<sup>6,7</sup>

This case is presented because of its rarity and also for establishing the effectiveness of treatment modality in these rare cases by long-term follow-up. At present, patient has received six cycles of adjuvant combination chemotherapy with paclitaxel 175 mg/m<sup>2</sup>, carboplatin 300 mg/m<sup>2</sup> and is on regular follow-up.

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