Synchronous primary endometrial and vaginal carcinoma in a virgin premenopausal patient

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Abstract

Synchromous endometrial and vaginal carcinoma is extremely rare. A 39-year-old virgin woman presented with weight loss, abdominal pain and heavy menstrual-intermenstrual bleeding. Pathology report of biopsies affirmed the diagnosis of primary endometrial endometrioid adenocarcinoma and vaginal squamous cell carcinoma. To the best of our knowledge, the report of this co-existence is the fourth one in literature.

Keywords: *carcinoma, endometrium, neoplasms, synchronous, vagina*

Introduction

"Synchronous" literally means at the same time and if two or more primary tumours occurs in a patient closely in time, then these are termed as synchronous tumours[1]. It was formerly reported that 0.7-1.8% of all women with gynaecological malignities had synchronous cancer of the female genital tract[2]. There are many case reports about the co-existence of endometrium and ovarian carcinoma. However, synchronous primary malignancies of endometrium and vagina are extremely rare. Here, we introduce an unusual case of vaginal squamous cell carcinoma (SCC) and endometrial endometrioid adenocarcinoma occuring simultaneously and presenting with abnormal vaginal bleeding.

Case Report

A 39-year-old virgin woman was admitted to our clinic with the complaint of lower abdominal pain and heavy menstrual-intermenstrual bleeding lasting for six months. Personal and family history was unremarkable except the rapid loss of 12 kg in this period. On bimanual rectal examination, there were irregularities on posterior vaginal wall and contours of rectovaginal region were fixed. Transpelvic ultrasonography revealed a 45 mm, irregular endometrium with cystic components, corruption at endometrium-myometrium interface and normal appearing adnexa. Serum Ca 125, Ca 19-9 and Ca 15-3 were between normal ranges. Having informed the patient about the possibility of uterine malignancy, endometrial biopsy under anestesia was planned. The labia majora and minora were edematous and eritematous. Speculum could not be applied since the entire vaginal mucosa was obliterated by tumoural lesions. Attempts were made to reach the uterine cavity for endometrial sampling by carmen cannula but failed. Finally multiple excisional biopsy samples from the proximal vaginal region close to the cervix and from the region close to vaginal introitus were taken.

Pathology report affirmed the diagnosis of primary vaginal squamous cell carcinoma for the biopsy samples taken from distal vagina (introitus) with the detection of atypical squamous cells infiltrating beneath the stratified squamous epithelium (Figure 1), and primary endometrioid adenocarcinoma organized as glandular and papillary structures for the samples taken from proximal region (Figure 2). The patient refused either chemotherapy or radiotherapy and died one month later.

Discussion

Patients with a cancer are at risk of developing another malignancy[3]. In patients with concurrent tumours, difference in prognosis, treatment regimens and possible response to therapy necessitates the proper distinction between multiple, independently derived primary tumours and a single primary malignancy with its metastasis[4]. In a study examining the clinical analysis of synchronous primary neoplasms of the female genital tract, the criteria for identification of the synchronous primary cancers included either the detection of different histological types, or the inclusion of all of the following minor criteria: (i) both tumours confined to primary sites, (ii) no direct extension between tumours, (iii) no lymph-vascular tumour emboli, (iv) none or only superficial myometrial invasion, and (v) none distant metastasis[5]. Our patient had SCC in vagina and endometrioid adenocarcinoma in endometrium. This difference in histology points that each tumour is primary.

There are many case series notifiying the synchronous tumours of female genitalia, but co-existence of endometrial and vaginal malignancies is extremely rare. To the best of our knowledge, there is only 3 patients already reported in current literature[6,7].

Unfortunately, data in these reports lack both adequate and definitive clinicopathological characteristics and histologic subtypes of cases. Also only one of these three patient prognosis was declared as 4 years[7], others were not. Our patient's survival was very poor, just one month, without any chemoradiotherapy. With the declaration of future reports about the co-existence of these cancers, the prognosis in this situation will be more definitive.

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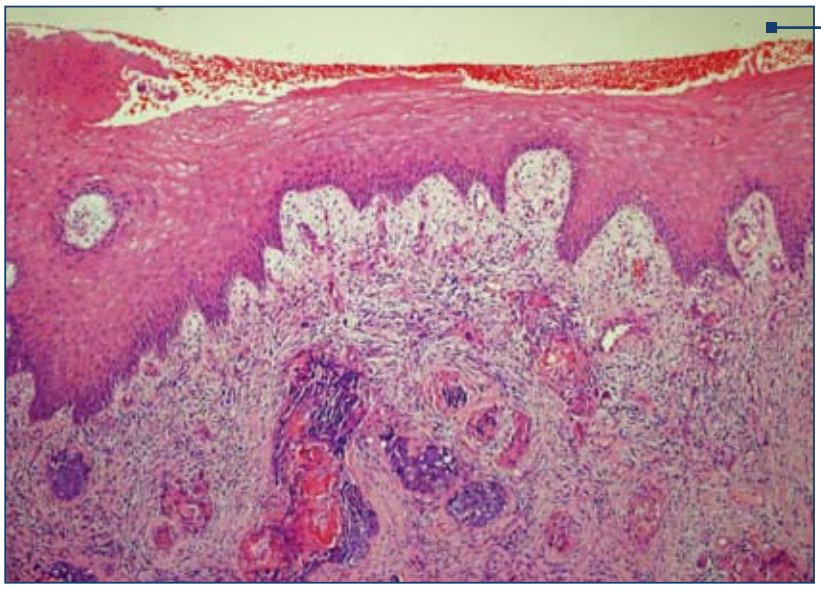

Figure 1. Neoplastic formation consisting of atypical squamous cells infiltrating beneath the stratified squamous epithelium in the form of islands, Squamous cell carcinoma (hematoxylin-eosin, magnification x 100)

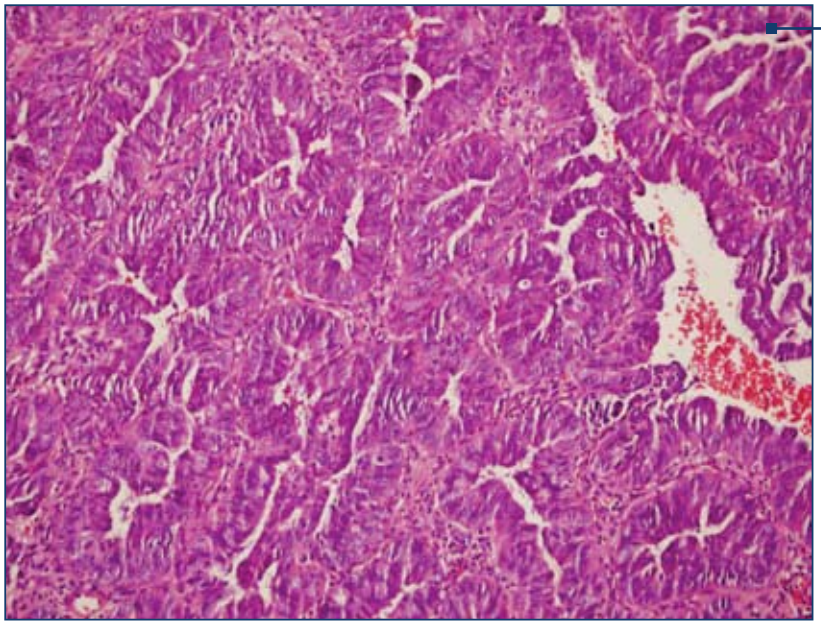

Figure 2. Endometrioid adenocarcinoma organized as glandular and papillary structures (hematoxylin-eosin, magnification x 200)

Today the occurence, complete pathogenesis and etiology of synchronous primary neoplasms still remain undetermined. High unopposed estrogen levels causing endometrial cancer triggered by obesity, premenopausal status and nulliparity are the main characteristics of the patients with synchronous tumours[8], which are directly observed in our case, too.

Conclusions

Our study revealed that in patients with gynecologic malignancy, the genital system and systemic evaluation should be reviewed in detail in respect to the existence of co-existent malignancies; and every detail that may contribute to the diagnosis and treatment process should be recorded. ■

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