

Epidermoid Carcinoma of Cervix Coexisting With Mature Cystic Teratoma of Ovary: A Case Report

Hakan KAYA¹, Okan ÖZKAYA¹, Mekin SEZİK¹, Ali Rıza AYDIN¹, Kayhan BAŞAK²

¹Department of Obstetrics and Gynecology, Süleyman Demirel University, Isparta, Turkey

²Department of Pathology, Isparta State Hospital, Isparta, Turkey

Abstract

Multifocal disease, both benign and malignant, is relatively common in the lower genital tract. However, multiple primary neoplasms arising in the ovary and uterine cervix are quite rare. We report a well-differentiated large cell epidermoid carcinoma of uterine cervix associated with a mature cystic teratoma of ovary in a 54-year-old woman. One case of mature cystic teratoma of the ovary with synchronous cervical cancer has been previously reported. Histogenesis of the synchronous tumors originating from the female genital tract may be secondary to an unexplained stimulus affecting embryologically related organs.

Keywords: cervical cancer, mature cystic teratoma, synchronous tumors

Özet

Overde Matür Kistik Teratom ile Beraber Serviks Epidermoid Karsinomlu Olgusu Sunumu

Alt genital yolda birçok odakta birden hem selim hem de habis hastalıklar oldukça yaygın bir arada izlenebilirken, serviksin ve overin primer tümörleri oldukça nadir olarak bir arada izlenmektedir. Biz, 54 yaşındaki bir kadında iyi diferansiye yassı hücreli serviks kanseri ile beraber overde saptanan matür kistik teratom vakasını sunduk. Literatürde günümüze kadar matür kistik teratom ile beraber serviks kanseri olan bir vaka bildirilmiştir. Kadın genital yolunun senkronize tümörlerinin histolojisi, embriyolojik olarak ilişkili organların açıklanmayan sekonder etkileşimine bağlı olabilir.

Anahtar sözcükler: servikal kanser, matür kistik teratom, senkronize tümörler

Introduction

Benign mature cystic teratomas (MCT) are relatively common and comprise 11-20% of all ovarian tumors. The incidence of MCT peaks in the third and fourth decades. MCT of the ovary is a tumor composed entirely of mature tissues originating from the three germ cell layers (1-3). Cervical cancer is the third most common genital malignancy in women. Squamous type accounts for about 85% of the cases and mixed adenosquamous carcinoma for about 15% of malignant epithelial neoplasms of cervix. Squamous cell cervical carcinoma originates from ectodermal cell layers and its incidence peaks in the fourth and fifth decades (4,5). With this study, we also reviewed literature about multiple tumors of the female genital tract.

Case Report

A 54-year-old woman, gravida 4 para 4, presented with a 1-month history of vaginal bleeding and persistent lower abdominal discomfort. The patient's obstetric and family histories were unremarkable. Speculum examination demonstrated a firm, friable, and exophytic cervical lesion, 1 cm in diameter, located in the squamocolumnar junction. Bimanual pelvic examination was normal. Punch biopsy was performed which revealed well-differentiated squamous cervical carcinoma with stromal invasion. Because the initial presentation indicated the possibility of surgical treatment, some additional procedures were planned. Transvaginal ultrasound scan, pelvic tomography, and pelvic magnetic resonance imaging were all negative for any metastases but revealed a right adnexal mass of about 4 cm in diameter with coexisting cystic and solid densities including calcifications. Computerized tomography scan of chest, sigmoidoscopy, and cystoscopy were all negative. Serum levels of CA 125, CA 19-9, CA 15-3, CEA, and AFP were normal. The patient was staged preoperatively as IB ac-

Corresponding Author: Dr. Hakan Kaya
Süleyman Demirel Üniversitesi Tıp Fakültesi, Kadın Hastalıkları ve Doğum Kliniği, 32040, Isparta, Türkiye
Phone : +90 (246) 211 21 00
Fax : +90 (246) 237 17 62
E-mail : drhakankaya2002@yahoo.com

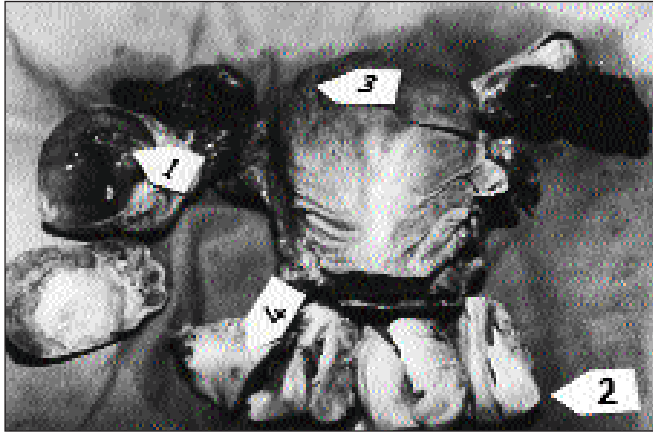


Figure 1. Macroscopic view of cervical carcinoma and right ovarian mature cystic teratoma (1. Mature cystic teratoma, 2. cervix uteri, 3. corpus uteri, 4. cervical carcinoma lesion).

ording to FIGO classification. Extensive (class III) abdominal hysterectomy and bilateral oophorectomy in combination with comprehensive pelvic/para-aortic lymphadenectomy was carried out. No palpable tumoral mass or lymph nodes were present during the operation. However, the right ovary contained a fragile cystic lesion, yellow in color about 4 cm in diameter (Figure 1). After the operation, the patient had an uneventful recovery. The pathology report described a well-differentiated large cell epidermoid carcinoma of cervix with abundant keratin that formed epithelial pearls. The depth of stromal invasion was 6 mm, and the maximum width was 12 mm. None of the removed lymph nodes had metastases. The right ovarian lesion was found to be a MCT. The histological examination showed the typical features of a MCT with squamous epithelium, respiratory epithelium, mature adipose tissue, mature smooth muscle tissue, peripheral nerve tissue, intestinal epithelium, gastric mucosa, and hair.

Discussion

Teratoma of the ovary may be cystic or solid. The cystic form is presented by the benign dermoid. Teratoma may occur at any age, but is more common in younger individuals (6). The principle histological type of invasive cervical cancer, occurring in about 85 % of cases, is the squamous lesion. Adenocarcinomas of the cervix are becoming more common, especially in younger women. They constitute between 5% and 15% of all cervical cancer (5).

Multifocal disease, both benign and malignant, is commonly seen in the lower genital tract (7). Studies about multiple tumors of the female genital tract are shown in Table 1. The most frequently observed synchronous neoplasm were those of the ovary together with the endometrium (7-9). However, multiple primary neoplasms arising in the ovary and cervix are relatively rare. In all the described cases of synchronous ovarian and cervical carcinomas, cervical tumors were adenocarcinomas (10,11). Kaminski *et al.* (11) reported coexistence of MCT of ovary and adenocarcinoma of cervix in 2.5% (4/161) of their cervical carcinoma cases.

Table 1. Studies about multiple tumors of the female genital tract (Number of cases are given)

	*	¶	§	a	b	**
Ayhan <i>et al.</i>	15					
Kaminski <i>et al.</i>		6	MCT: 4 Other: 4			
Ilesanmi <i>et al.</i>		4				
Matscoane <i>et al.</i>		1				
Choo <i>et al.</i>	48					
Scharl <i>et al.</i>		1				
Lee <i>et al.</i>						1
Jackson-York <i>et al.</i>					1	
Hunter <i>et al.</i>					1	
Woodruff <i>et al.</i>	54					

* Ovarian carcinoma and endometrium adenocarcinoma
 ¶ Ovarian carcinoma and cervical adenoc
 § Cervical adenocarcinoma and benign ovarian tumors
 a Ovarian adenocarcinoma and MCT (mature cystic teratoma)
 b Cervical adenocarcinoma and fallopian tube carcinoma
 ** Fallopian tube carcinoma and MCT

Simultaneous occurrence of primary adenocarcinoma of fallopian tube and MCT of ovary has been described recently (12). Jackson-York *et al.* (13) presented a unique case of synchronous trifocal mucinous papillary adenocarcinoma involving the uterine cervix and both fallopian tubes. Hunter *et al.* (14) described a case of an ovarian epithelial adenocarcinoma of low malignant potential associated with a MCT. However, mucinous adenocarcinoma and strumal carcinoid tumor arising in one mature cystic teratoma of the ovary with synchronous cervical cancer has been previously reported (15). To our knowledge, our case is the second report of such an association.

In conclusion, histogenesis of multiple tumors of the female genital tract may be secondary to an unexplained stimulus affecting embryologically related organs. After finding a malignant focus in the genital tract, the clinician and the pathologist must be aware for the possibility of other foci. More studies are needed on the subject of synchronous primary neoplasms of the genital tract, especially of the uterine cervix and the ovary.

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