

# Cecal Adenocarcinoma with Vaginal Metastasis: A Case Report

## ÇEKAL ADENOKARSİNOMADA VAJİNAL METASTAZ: BİR OLGU SUNUMU

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### Summary

**Objective:** Secondary carcinoma of the vagina is seen much more frequently than primary disease.

**Case Report:** We present a case of adenocancer of cecum with isolated vaginal metastasis managed with local excision two months after the primary surgery (right hemicolectomy and ileotransversostomy). Patient has no sign of recurrent disease after 17 months of follow-up.

**Conclusion:** We discussed the possible ways of metastasis of adenocancer of colon and treatment modalities in secondary vaginal cancer.

**Key Words:** Cecal adenocarcinoma, Vaginal metastasis

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### Özet

**Amaç:** Vajinanın sekonder kanseri primer kanserinden daha sık görülmektedir.

**Olgu Sunumu:** Bu yazıda izole vajinal metastazı olan bir çekum adenokanseri olgusu sunulmuştur. Hastaya primer cerrahiden (sağ hemikolektomi ve ileotransversostomi) iki ay sonra lokal eksizyon uygulandı. On yedi aylık takip sonrası hastada halen rekürrens gelişmediği saptandı.

**Sonuç:** Bu yazıda kolon adenokanserinin metastaz yolları ve vajinanın sekonder kanserlerinde tedavi şekilleri tartışıldı.

**Anahtar Kelimeler:** Çekal adenokarsinom, Vajinal metastaz

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Primary cancer of vagina is one of the rarest of the malignant processes in the human body. It occurs in less than 2% of patients with gynecologic malignancies.

Secondary carcinoma of the vagina is seen much more frequently than primary disease. Extensions of cervical cancer to the vagina probably account for the greatest number of so-called vaginal cancer (1). Although secondary tumors from pelvic organs such as cervix, endometrium and choriocarcinoma occur with greatest frequency, true secondary lesions from more remote foci are unusual. Examples are cancers of ovary, urethra, bladder, kidney (2-6), breast (7,8), colon (9,10), and pancreas (11).

In this report we present a case of cecal adenocarcinoma with vaginal metastasis.

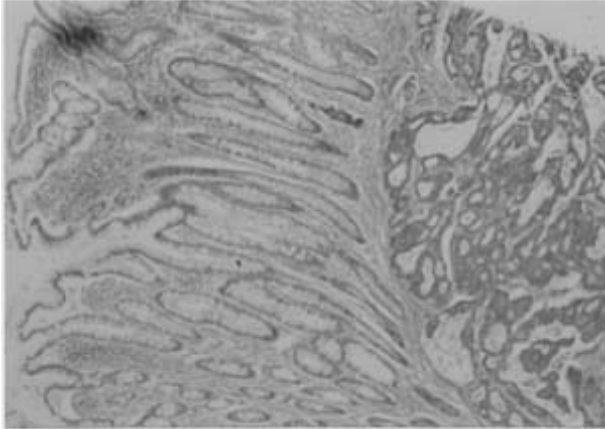
### Case Report

A 63 year-old woman with 18-year history of menopause was referred for vaginal bleeding of one month duration. Two months prior to her referral, stage III (Dukes C), moderately differentiated adenocarcinoma of cecum (Figure 1) was diagnosed after laparotomy. She underwent right hemicolectomy and ileotransversostomy. Postoperatively she received adjuvant chemotherapy of fluorouracil (5-FU) and leucovorin. One month after chemotherapy, at

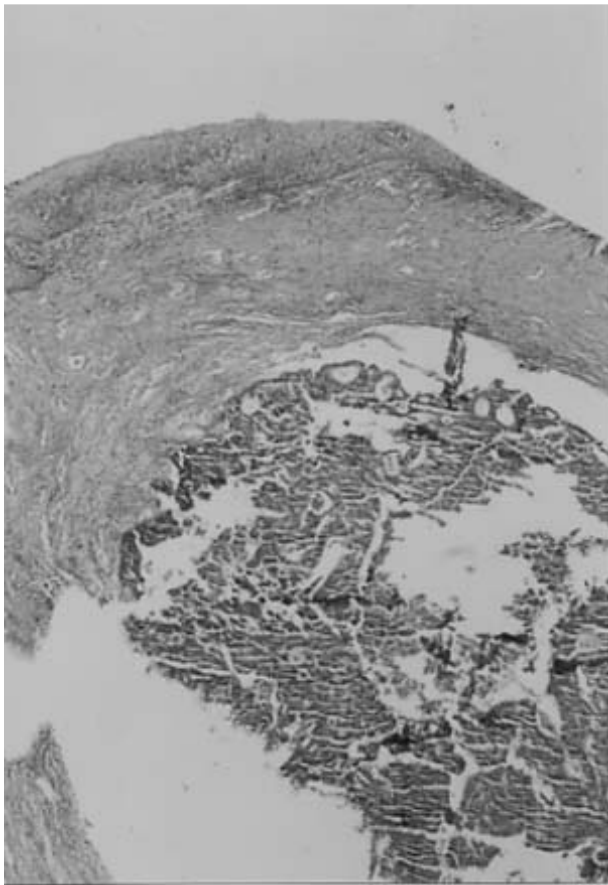
her admission to our clinic, her pelvic examination showed a 2 cm. diameter verrucous, hyperemic lesion at the distal portion of vagina. It was evaluated as not to involve the subvaginal tissue (stage I according to the International Federation of Gynecology and Obstetrics). No pathologies were determined in cervical-endocervical smears and endometrial sampling. Her chest film, intravenous pyelogram and cystoscopy were normal. The patient refused to have total vaginectomy then the lesion was removed with a safety margin of 1 cm. Histological examination showed moderately differentiated adenocarcinoma of vagina with plenty of mitotic figures (Figure 2). The margins of the specimen was free of disease, 1 cm away from the lesion. Patient received another four course of 5-FU and leucovorin and 20 months after the local excision of tumor she was disease free with no vaginal recurrence.

### Discussion

Most common histologic type of primary vaginal tumor is squamous carcinoma which accounts for 84% to 90% of all vaginal cancers. Adenocarcinoma represents about 4% to 9% of vaginal cancers (12). Our case of vaginal adenocarcinoma with a history of operated colorectal carcinoma is considered as secondary form.



**Figure 1.** Adenocarcinoma showing cribriform pattern in colonic wall (HE X 100).



**Figure 2.** Metastatic adenocarcinoma with similar differentiation in vaginal wall (HE X 100).

Secondary vaginal adenocarcinoma represents 2.6% of all gynecological adenocarcinomas. 92.5% of apical lesions were metastasized from the upper genital tract, and 90.0% of the posterior lesions were from the gastrointesti-

nal tract (13). But there are a few reports of vaginal metastasis of colorectal adenocarcinoma (9,10,14,15). Colorectal adenocarcinoma accounts for nearly 15% of all cancer-related deaths in the United States (16).

Routes of spread of the extrapelvic primary carcinoma to the vagina are arterial, venous or lymphatic. Likewise recurrence patterns of colorectal cancer are the result of local extension or implantation as well as lymphatic or hematogenous dissemination. When colonic adenocarcinomas penetrate the muscularis mucosa, they can spread by lymphatics. Lymph nodes closest to the tumor and bowel wall are often involved initially, then tumor tends to progress from lymph node to lymph node. In addition tumor can spread through vascular routes to involve liver, lung, and ovaries, and less commonly bone, testis, uterus, oral cavity and the CNS (16).

In this case, vagina appeared to be the only site of metastasis of the cecal adenocarcinoma. Therefore in the absence of other site metastases, spread through systemic circulation is unlikely. Lymphatic drainage being the most common dissemination pattern of colorectal carcinoma (25-40%), cannot be thought to be the etiology of vaginal metastasis in our case because of lack of communication between the lymphatics of colon and vagina. The most probable route of dissemination in our patient seems to be retrograde venous metastasis to the pelvic area through the paravertebral plexus of Batson (9,10).

Likewise, the dissemination route of renal carcinoma to the vagina is also thought to be by retrograde venous route via the ovarian vein. This is especially true for left-sided hypernephroma since left ovarian vein drains into the left renal vein thus facilitates retrograde dissemination of tumor emboli (3).

In this report we presented a case with cecal adenocarcinoma with vaginal metastasis. Because of short interval between the primary disease and the occurrence of vaginal metastasis this case was reevaluated as stage IV colon cancer. Because the adenocarcinoma of vagina spreads subepithelially, total radical vaginectomy and hysterectomy with lymph node dissection were indicated but could not be accomplished due to the refusal of the patient. The patient also refused the adjuvant interstitial radiotherapy (17). Up to date no recurrences were observed on computerized tomography and abdominal ultrasonography scans. Local excision of this isolated metastasis of colon cancer seemed to be curative in this particular case after 20 months of the vaginal operation.

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