A Case Report of Endometrial Cancer Metastatic to the Sigmoid Colon

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Abstract

Background: Metastatic endometrial cancer to the sigmoid colon is quite rare. We present a case of metastatic endometrial cancer with metastases to the sigmoid colon five years after surgical treatment of early stage endometrial cancer.

Method: This article is a description of one case story.

Results: A case of a postmenopausal woman with a moderately differentiated endometrial endometrioid adenocarcinoma is presented. Status post-surgery involved total abdominal hysterectomy and bilateral salpingo-oophorectomy outside King Hussein Cancer Center (KHCC); she refused any adjuvant therapy.

Six year later, she developed distant metastasis to sigmoid colon for which she underwent partial colectomy and lymph node dissection. Histopathology showed: Metastatic High Grade Carcinoma Consistent with Recurrent Clear Cell Endometrial Carcinoma, 0 out of 22 lymph nodes, free resection margins. Again, she refused adjuvant chemotherapy. The last visit was on 20, January 2019 the patient still alive and free of disease.

Conclusion: The case presented here indicates that patients without adjuvant treatment in the form of radiotherapy or chemotherapy for moderate or high-grade endometrial carcinoma may survive for a long time.

Our patient lived longer than the expected high histology type, but our clinical case clinical scenario should never be used as a pretext for not treating these patients with adjuvant therapy.

Keywords: Uterus; Metastatic endometrial cancer; Secondary colon cancer; Immunohistochemistry

Introduction

Ninety percent of endometrial cancer cases are of the endometrioid type, which tend to present at an early stage of the disease and are amenable to cure by surgery. The remaining cases (less than 10%) are mostly composed of uterine papillary serous carcinoma and clear cell carcinoma, which constitute almost half of all recurrences. In addition to the histologic type of endometrial cancer, the initial stage at diagnosis is an important predictor of relapse because the more advanced the stage, the higher the risk of micro metastasis [1].

Primary colonic adenocarcinomas account for the majority of malignant tumors identified at colonoscopy. Less commonly, metastasis from other primary cancers, including breast, ovary, prostate, lung, and stomach, and can present as a colonic tumor [2]. Here, we present a case of metastatic endometrial cancer to the bowel in a patient with a history of endometrial cancer. Patients rarely refuse any kind of cancer therapy allowing observation of the natural course of malignant disease.

Case Presentation

A 68-year-old female patient presented to the radiation oncology department at King Hussein Cancer Center (KHCC) in September 2006 with a diagnosis of endometrial endometrioid type of adenocarcinoma, status post total abdominal hysterectomy and bilateral salpingo-oophorectomy without pelvic lymph node dissection at a private hospital. FIGO stage IIA (FIGO staging 1988).
According to our policy, every pathology specimen outside KHCC should be reviewed; pathology review showed the followings: endometrial adenocarcinoma grade II, Invade invasion of half of the myometrium and upper cervix, and No Lympho Vascular Invasion (LVI). At KHCC, the metastatic work up was negative locally and distally.

We discussed the case at with the gynecology oncology Multi Disciplinary Team (MDT) and the decision was to give post-operative radiotherapy. Moreover, after discussion with the patient about the effect and side effect of radiotherapy treatment she refused, so we referred her back to her primary gynecology physician for further follow up.

Four months later, she was again referred to us again from by her primary physician after she underwent Pelvic Lymph Nodes Dissection (PLND) and Omentectomy, (six months after primary surgery). We reviewed the specimen of pelvic lymph node specimen and it showed that all harvested (10) lymph nodes dissected negative.

For that she came to us asking for adjuvant brachytherapy, but we did not recommend it because of the length of the period (duration between primary surgery and PLND is about six months), which exceeds the permissible period for adjuvant treatment. The patient kept on follow up every three to four months for the first two years, then every six months for the next three years.

The patient did well till 2012 when she came to the emergency department at KHCC with abdominal pain and partial intestinal obstruction, sigmoidoscopy was performed, and a biopsy was ordered and showed A 6 cm × 4 cm × 3 cm ulcerating mass involving the sigmoid colon is identified.

A high-grade tumor with a clear cytoplasm in most of the areas examined (Figure 1) is consistent with clear cell carcinoma is identified. Focally, however, an endometrioid morphology comparable to the original tumor still be appreciated can be seen.

Then, she underwent partial colectomy, left iliac lymph nodes and peri-colic lymph nodes’ dissection. Histopathology showed: Metastatic High Grade Carcinoma Consistent with Recurrent Clear Cell Endometrial Carcinoma, (0/22) lymph nodes, R0 resection. The post-operative period was smooth.

Again, we discussed the case at with the gynecology- oncology MDT and the decision was to give adjuvant chemotherapy, but the patient refused, so kept on regular follow up.

Now she is on Follow up with Pap smear every twelve months, the last visit was on 20, January 2019 and she is doing well without complaints. The Last Pap smear taken and appeared normal.

Discussion

Endometrial cancer is the fifth most common cancer in women in Jordan and ranks twelfth in cancer-related deaths among women [3]. Endometrial cancer has many histologic subtypes, with endometrioid adenocarcinoma being the most common. Staging of endometrial cancer is performed surgically and classified according to the FIGO staging classification.

Several risk factors for recurrence in early stage endometrial endometrioid type cancer have been identified; including histologic grade 3, depth of myometrial invasion (>50%), and age >60 years [4,5], along with lympho vascular invasion, and lower uterine involvement. In addition to as well as high histology types such as clear cell. Adjuvant radiation can be considered if two of the above risk factors are present in addition to high histology type regardless the stage. Since our patient had two risk factors (stage IIA by old FIGO staging 1988 and tumor with >50% myometrial invasion), So we recommended her adjuvant radiation therapy with vaginal brachy.

Typical sites of recurrence are loco regional organs including the vagina and pelvic lymph nodes. A typical site includes lungs, bones, brain, and visceral organs [6]. Our patient developed a distant disease recurrence at an atypical site; the sigmoid colon.

Endometrial cancer metastasis to the bowel has been described but is rare. While rare, it is important for gastroenterologists, along with pathologists and oncologists, to keep metastatic disease in the differential diagnosis of tumors in the intestine.

Our patient had a recurrence more than 6 years from diagnosis of endometrial cancer while most relapses occur within 3 years after hysterectomy for endometrioid carcinoma. Her presentation was interesting since she presented with symptoms of bowel obstruction, and her colonoscopy showed evidence of an obstructing colonic mass, which was thought to be primary colon cancer versus metastatic endometrial cancer in the colon wall. Colonic obstruction secondary to recurrent gynecologic malignancies is commonly a consequence of external compression.

It seems that the cause of metastatic endometrial cancer to the sigmoid colon is the presence of foci of clear cell component foci in the first specimen after hysterectomy that was missed at the first review and had been found retrospectively when our pathologist found that the new pathology of metastasis is a high clear cell. Which This lead the pathologist to review again the first specimen after hysterectomy again, and found that there was foci of clear cell that were missed at

**Figure 1:** A-C) The original tumor at the hysterectomy specimen and D) the metastatic tumor to the sigmoid colon.

A: There is proliferation of the glands lined by the tall columnar cells with cigar-shaped nuclei, which is consistent with endometrioid carcinoma. B: Another focus shows clearing of the cytoplasm but with preserved glandular architecture. C: Clear cells with hob nailing of nuclei, prominent nucleoli and clear cytoplasm, surrounding hyalinized papillary core consistent with a small focus of clear cell carcinoma, was seen in the original specimen (arrow). D: Clear cells with well-defined cytoplasmic membrane, and clear cytoplasm growing in glandular and solid patterns formed the major component in the metastatic carcinoma. All images are H&E X40.
the first review and this may be the cause of metastasis to the sigmoid colon [7-9].

References