CASE REPORT

Unusual Presentation of Cancer Colon

Verma Kamal · Mehdi Itrat · Ibrahim Nazhia ·
Hashmi Hussein

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Case Report

This patient, a 75-year-old Libyan female, presented to African Oncology Institute with complaints of progressively worsening watery and offensive discharge per vaginam for last 1 month with a history of intermittent episodes of bleeding per vaginam. She was postmenopausal; gravida 14; known hypertensive and diabetic, controlled on treatment; and had a surgical history of cholecystectomy in remote past. On presentation, her cardiorespiratory and abdomen examinations were normal.

Verma K., Consultant
Department of Radiation Oncology, African Oncology Institute,
Sabratha, Libya

Verma K. (✉), Consultant
Department of Radiotherapy, African Oncology Institute, Sabratha,
Libya
e-mail: kv_erma@yahoo.com

Mehdi I., Consultant
Department of Medical Oncology, African Oncology Institute,
Sabratha, Libya

Ibrahim N., Consultant
Department of Pathology, African Oncology Institute, Sabratha,
Libya

Hashmi H., Executive Director and Head of Department of Surgical
Oncology
Department of Surgical Oncology, African Oncology Institute,
Sabratha, Libya

The pelvic examination revealed a big mass protruding from os whose origin appeared to be cervix. The uterus was irregularly enlarged, mainly in lower segment.

Diagnostic workup included ultrasonography pelvis which revealed uterus with thin endometrium and a 5-cm × 5-cm mass occupying cervix. Sonography of abdomen was remarkable for somewhat edematous and dilated small colon but without any obvious mass or adenopathy. Computerized tomography scan of abdomen and pelvis revealed thick-walled and largely opened vagina which appeared hypodense in comparison to uterus and revealed a growth appearing highly suspicious of neoplastic lesion (Fig. 1). The patient was subjected to examination under anesthesia which revealed a 3–4 cm fungating and friable mass involving entire cervix, and extending to upper part of vagina. Uterus was large and partially mobile. Rectovaginal examination revealed induration of inner one-third of left parametrium while the right parametrium was normal. Rectum was normal with the presence of normal-colored stool. Her CEA and CA 19.9 were within normal limits. A punch biopsy was taken from this cervical mass. Histopathologic examination of this biopsy reported the mass to be well-differentiated papillary adenocarcinoma and appeared to be of endometrial origin. With these findings, the patient was diagnosed as a case of adenocarcinoma uterus and staged IIIA per FIGO classification. The patient was discussed in multidisciplinary oncology committee of the institute and was decided as a candidate for neoadjuvant radiotherapy to be followed by radical hysterectomy.

Fig. 1 CT scan pelvis showing thick-walled vagina with adherent large bowel

The patient completed preoperative external beam radiotherapy to a tumor dose of 5000 cGy/25 F over 5 weeks to pelvis by anterior-posterior/posterior-anterior parallel opposed fields by Co-60 and after 6 weeks, the patient was considered for radical hysterectomy. Laparotomy revealed a mildly enlarged uterus with normal ovaries and adnexa. There were relatively dense adhesions between part of colon and uterus and it was difficult to resect this part of colon away from uterus. This was removed en bloc and a colostomy was carried out.

Section from colonic mucosa revealed infiltration of colonic mucosa by moderately differentiated adenocarcinoma (Fig. 2). The overlying mucosa showed evidence of in situ changes (thick arrow) pointing to the colonic origin of tumor. These were gland-forming with variability in the size and configuration of glandular structure, and the glandular lamina contained cellular debris. Unremarkable colonic mucosa was also seen in same section (thin arrow). The defining feature of colorectal adenocarcinoma is invasion into the submucosa. Insitu lesions have virtually no risk of metastasis but most of the invasive tumors progress from in situ lesions. So, the concomitant presence of in situ lesions adjacent to the invasive carcinoma component is a strong evidence that the examined specimen of colon is the origin of primary adenocarcinoma. Examination of the cervical sections (Fig. 3) revealed subepithelial infiltration by moderately differentiated adenocarcinoma (thick arrow) with massive inflammation along with non-neoplastic cervical lining (thin arrow).

In light of these developments, the patient was again discussed in oncology committee. With conclusive pathologic findings, the case was re-diagnosed as a case of adenocarcinoma of sigmoid colon with invasion of adjacent uterus and staged as T4, N0, M0; post neoadjuvant

Fig. 2 Section from colonic mucosa with in-situ changes in colonic mucosa (thick arrow) and areas of normal mucosal (thin arrow)

Fig. 3 Section from cervix showing normal epithelium (thin arrow) with interspread subepithelial foci of adenocarcinoma (thick arrow)

radiotherapy; post en-bloc resection of sigmoid colon with uterus and cuff of vagina, bilateral salpingo-oophorectomy, and permanent colostomy. It was decided to proceed with adjuvant chemotherapy with FOLFOX regimen (Inj. Fluorouracil IV + inj leucovorin + inj oxaliplatin repeat every 4 weeks). Currently, patient has completed three cycles and is tolerating the treatment well without any complications.

Discussion

The commonest presentations of colon cancer include abdominal pain, constipation, and melena. This cancer

carries a high potential of local as well as distant metastases and in majority of cases the extent of involvement is easily established by routine imaging procedures. Involvement of other systems may contribute to variable presentations of colon cancer. Some of the unusual presentations reported in literature include an postmenopausal bleeding [1], groin mass [2], vulval mass [3], and lung nodule [4]. This patient had cancer sigmoid colon masquerading as cancer uterus which could be detected only after histopathologic examination of en-bloc resection.

This patient presented with postmenopausal bleeding and was initially diagnosed as a case of adenocarcinoma uterus based on clinical, radiologic, and histopathologic features. During the course of treatment, when subsequent histopathology (en bloc resection) revealed the primary site in bowel, her diagnosis was changed to adenocarcinoma of sigmoid colon with invasion of adjacent uterus. This patient had all her signs and symptoms indicative of a genital tract pathology. These features also correlated with subsequent examination and the initial histopathologic finding. Although, the primary site of origin was sigmoid colon but she never had any features referring to gastrointestinal tract at any time during the course of her illness. At the same time, the extension of her disease to genital tract was overwhelmingly obvious with the presenting feature of 4-cm ulcerated mass and bleeding per vaginam. Even the biopsy from this lesion was not indicative of a silent primary of colon. A clinically silent primary site with a highly manifesting secondary involvement is unusual for abdominopelvic malignancies. This might be due to extensive involvement of all layers of uterus and the nearly similar microscopic appearance of adenocarcinoma of genital and gastrointestinal tracts. This problem is exaggerated by the fact that till date there is no absolutely specific histopathologic feature known for differentiation of primaries from these two systems. In some situations, the cancers of endometrium can be differentiated from cancer colon by immunohistochemistry as endometrial cancers are predominantly CK7+/CK20– and colon adenocarcinomas are mainly CK7–/CK20+ [5]. Till such an ideal marker becomes available, patients with pelvic malignancies should be evaluated with caution in view of possibility of overlapping primaries. This also emphasizes the need for a more careful evaluation of these tumors in their three-dimensional aspect before deciding the treatment plan.

A similar and unique case with postmenopausal bleeding as the presenting feature of colon cancer was reported by Aella et al. [1]. For this case, the primary site in colon was diagnosed by CEA levels, radiologic workup, and pathology. For CEA-negative patients with non-suspect pathologic or radiologic features, such silent primary site can be diagnosed by including cystoscopy and/or colonoscopy in workup. However, rarely, even scopes may fail to detect primary site.

Wimmer et al. [6] reported a patient with primary sigmoid colon cancer with gross sparing of mucosa. The primary site could not be found even after colonoscopy performed twice and the diagnosis was established only after histopathology of the collection formed by invasion of adjacent pericolic region.

The current NCCN guidelines for management of cancer cervix recommend cystoscopy/proctoscopy as optional workup only for stage >IB2 where there is clinical suspicion and for cancer endometrium it is not included as part of initial workup for any stage. The literature also reports overlapping of clinical features in pelvic malignancies, and does recommend scopes in such cases to establish the primary site of origin and to rule out synchronous multiple primaries but there is very scant literature regarding a silent primary with full-blown features confined to an altogether different system. An analysis of series of such cases is required to evaluate the feasibility of including cystoscopy/colonoscopy in routine workup.

In addition to this type of locally invasive behavior, colorectal cancers have a high metastatic potential. The most common metastatic sites for colorectal cancer are liver and lymph nodes, reported in almost 50 % of patients. Less commonly, it spreads to peritoneum, lung, brain, or bones. This involvement can be detectable or occult at primary site or metastatic site. Similar to our case, few other cases with asymptomatic primary colonic cancers and presenting features of a different organ have also been reported including metastases to spleen [7], subcutaneous tissue [2], vulva, [3] and lung [4]. Lam et al. [8] reported an unusual presentation with pericarditis and cardiac tamponade as the presenting feature of colon carcinoma. Any of these primary, regional, or metastatic sites may be clinically silent, whereas other site of involvement may have more obvious clinical features in comparison to the primary site. This is due to different growth patterns of cells at different sites. While managing patients with pelvic malignancies, we should always be aware of variable presentations of pelvic malignancies.

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