An unusual presentation of metastatic squamous cell cervical carcinoma involving the distal ileum mimicking Crohn’s disease

ERIC M YOSHIDA MD FRCPC, HUGH CHAUN BM FRCPC, KENNETH D SWENERTON MD FRCPC, KENNETH W BEREAN MD FRCPC, GREGOR I McGREGOR MD FRSC

EM YOSHIDA, H CHAUN, KD SWENERTON, KW BEREAN, GI McGREGOR. An unusual presentation of metastatic squamous cell cervical carcinoma involving the distal ileum mimicking Crohn’s disease. Can J Gastroenterol 1994;8(5):323-325. Both primary and secondary malignant diseases may present with a clinical, radiological and/or endoscopic picture resembling Crohn’s disease. In this report, a 64-year-old woman previously treated surgically and with radiation for stage I B squamous cell carcinoma of the cervix presented with diarrhea and had endoscopic findings simulating Crohn’s disease. Biopsies and subsequent laparotomy revealed that the lesions were metastatic cervical carcinoma involving the terminal ileum.

Key Words: Carcinoma, Cervical, Crohn’s disease, Ileum, Metastatic

Tableau clinique inhabituel d’un cancer du col métastatique à cellules squameuses affectant l’iléon distal et évocateur d’une maladie de Crohn

RÉSUMÉ : Les néoplasies primaires et secondaires peuvent se présenter sous la forme d’un tableau clinique, radiologique ou endoscopique ressemblant à la maladie de Crohn. Dans ce rapport, une femme de 64 ans, traitée auparavant chirurgicalement et par irradiation pour un cancer du col à cellules squameuses de stade B1, s’est présentée avec de la diarrhée et des signes endoscopiques évocateurs de la maladie de Crohn. Les biopsies et la laparotomie subséquentes ont révélé que les lésions étaient des métastases de son cancer du col ayant atteint l’iléon terminal.

Invasive carcinoma of the uterine cervix is the third most frequent genital cancer among females (1). The time interval from carcinoma in situ to invasive cancer varies but 30 to 71% of untreated patients will develop invasive cancer 10 to 12 years after the development of carcinoma in situ (2). Metastatic spread is usually lymphatic to regional then para-iliac and aortic nodes. Hematogenous metastases are uncommon but have been reported to occur in bone (3), lung (4), pericardium and myocardium (5,6), kidney (7), brain (8) and skin (9). In the gastrointestinal tract, metastatic disease has been described in the small intestine (10,11), most likely from lymphatic spread although one report of ileocolic metastasis was attributed, perhaps erroneously, to hematogenous seeding (12). Possible hematogenous spread to the colon (13) and liver (14) has been reported. Small bowel metastases have usually presented with obstructive symptoms. In this report, a patient with an isolated distal ileal metastasis from cervical carcinoma had endoscopic findings resembling...
Crohn's disease. A Crohn's-like presentation of cervical carcinoma has not been reported before.

**CASE PRESENTATION**

Two years previously, a 64-year-old Caucasian woman had undergone radical hysterectomy and pelvic lymphadenectomy followed by a full course of pelvic radiation therapy for invasive stage IB squamous cell carcinoma of the cervix. The patient experienced diarrhea during radiation therapy which resolved after the radiation was completed. One year later the diarrhea recurred but was nonbloody. One month before presentation, she noted streaks of blood in the stools. She also complained of occasional intermittent periumbilical pain which predated her hysterectomy and occurred about once every one to two months. Apart from a previous appendectomy, there was no history of gastrointestinal disease. An upper gastrointestinal series performed six years previously was unremarkable. There was no family history of inflammatory bowel disease. Physical examination, including bimanual examination of the pelvis, was unremarkable. A Papanicolaou smear for cytology was negative. The hematological profile and liver enzymes were normal as were radiographs of the chest. A computed tomography scan of the abdomen and pelvis just before presentation did not demonstrate any evidence of recurrent disease.

At colonoscopy, the ileocecal valve was hyperemic and unusually prominent. There was a mucus exudate overlying hyperemic mucosa in the terminal ileum. Biopsies were taken of these areas. The rest of the examination was normal. The findings at colonoscopy were suggestive of Crohn's disease of the distal ileum. Histopathological examination of the biopsies, however, revealed an infiltrating, moderately differentiated squamous cell carcinoma of the terminal ileum and ileocecal valve, consistent with metastatic squamous cell carcinoma of the cervix, with a surrounding inflammation. There was no evidence of vascular invasion.

A right hemicolectomy was undertaken. At surgery there was thickening of the terminal ileum consistent with previous irradiation and an isolated firm nodule; there was no other evidence of intraperitoneal malignancy. The resected right hemicolectomy specimen measured 57 cm in length and consisted of 40 cm of distal ileum and 17 cm of cecum and ascending colon. A firm grey-white circumferential lesion with areas of necrosis was present in the terminal ileum. Histological examination of this lesion showed moderately differentiated squamous cell carcinoma involving the full thickness of bowel wall (Figure 1). The tumour was histologically identical to the primary cervical cancer. One mesenteric lymph node adjacent to the tumour was replaced by mesenteric squamous cell carcinoma. The rest of the mucosa did not reveal evidence of inflammatory bowel disease. Abdominal ultrasonography postoperatively was unremarkable.

**DISCUSSION**

This patient had colonoscopic findings consistent with Crohn's disease. Biopsies of the distal ileum, however, revealed metastatic squamous cell carcinoma with surrounding inflammation. The metastatic lesion was confined to the terminal ileum; the rest of the distal ileum was thickened, attributed to previous radiotherapy. Crohn's disease is a chronic inflammatory disorder of unknown etiology. The age distribution is bimodal with peaks in young adulthood and in the sixth to ninth decades (15). Any part of the gastrointestinal tract may be affected. At least three-quarters of patients have involvement of the small intestine, of which 90% involve the terminal ileum (16). Although granulomata are characteristic of Crohn's disease, they are seen in less than 50% of cases (16). Their absence does not exclude a diagnosis of Crohn's disease. On the other hand, many other conditions of known etiology can appear similar to idiopathic Crohn's disease, the most well recognized being infectious diseases with mycobacterial, bacterial (e.g., yersinia enteritis) and viral (e.g., cytomegalovirus in immunosuppressed patients [17]) pathogens.

As in our patient, neoplastic disease and/or sequelae of treatment may resemble Crohn's disease clinically and radiologically (18,19). Both primary
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and secondary malignancies have been reported to mimic Crohn's disease. Locally invasive adenocarcinoma of the colon has, radiologically, been mistaken for Crohn's disease (20), as has primary adenocarcinoma of the ileocecal region (18,20). Carcinoid tumors (18,19,21) and lymphomas, both Hodgkin's (18) and non-Hodgkin's (22), have also been reported to simulate Crohn's enteritis and colitis, respectively. There have been reports of primary malignancies, including lung (23), melanoma (24), thyroid (25) and hepatocellular carcinoma (26), metastasizing to the ileum and jejunum. For the most part, these secondary tumors have been clinically distinguishable from Crohn's disease. Other metastatic lesions to the small intestine, however, have been reported to mimic Crohn's disease. In particular, this has been described with metastatic lesions from the breast (18,27,28) and stomach (29,30). In a 1989 review (31) there were 13 cases of breast cancer and five cases of gastric cancer that mimicked Crohn's disease reported over almost 30 years. Twelve of these cases involved the terminal ileum. The sequelae of oncological therapy, specifically radiation, may also result in an endoscopic (32) and radiological (33) picture resembling Crohn's disease.

The endoscopic features noted in our patient's distal ileum were suggestive of Crohn's disease. Similar findings have been described previously with other malignancies (18,22,29). Interestingly, in one report of limis plastic of the sigmoid colon, initial endoscopic biopsies revealed acute and chronic inflammation only, which seemed to confirm a diagnosis of Crohn's colitis (18). The authors felt that, in retrospect, the inflammatory changes were reactive to the malignant process. In our patient, although it is possible that the endoscopic changes seen were due to radiation enteritis, biopsies of the involved area demonstrated infiltrating squamous cell carcinoma. Like the other cases, we feel that the endoscopic features of our patient were secondary to the malignancy.

In conclusion, this case of a patient with an isolated metastatic cervical cancer of the terminal ileum presenting as Crohn's disease underlines the need to consider neoplastic disease in the differential diagnosis of apparent inflammatory bowel disease and a history of previous malignancy.

REFERENCES

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