

Colonic metastasis from carcinoma cervix: an unusual cause of intestinal obstruction

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Abstract

Intestinal obstruction is a rare complication after pelvic radiotherapy for carcinoma cervix. Metastasis from carcinoma of the uterine cervix to the gastrointestinal tract is uncommon. We report a case of a 36-year-old woman who was treated by concurrent chemo-radiation for stage II B carcinoma of the uterine cervix. Five years later, she presented with acute intestinal obstruction. A laparotomy revealed a metastatic growth in the transverse colon, which was resected. The colon is an unusual site for metastasis from carcinoma cervix, and it has to be differentiated from a primary squamous cell carcinoma of the colon. Resection of the metastatic lesion may help palliate acute intestinal obstruction, and possibly prevent a perforation, which can rapidly become fatal.

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Introduction

Distant metastasis, after radical radiotherapy in carcinoma cervix, is a terminal event, occurring in around 9-27% of patients.¹ The most common sites of metastasis are the lungs, bones, and para-aortic lymph nodes.¹ Metastasis to colon is extremely rare.^{1,2} Intestinal obstruction is a rare complication after pelvic radiotherapy.³ We present a case of colonic metastasis from cervical carcinoma, presenting with an acute intestinal obstruction five years after completion of treatment for carcinoma cervix.

Case study

A thirty-six-year-old woman with squamous cell carcinoma of the cervix (stage II B) was treated with concurrent chemo-radiation in our institution. After completion of treatment, she had no evidence of disease loco-regionally, and she was regularly followed up (every three months for the first three years, and every six months for the next two). Five years later, she presented with abdominal pain, non-bilious vomiting, and abdominal distension. An examination revealed non-tender, diffuse abdominal distension, with sluggish bowel sounds. On abdominal and rectal examination, no masses were palpable. Locally, she

had no evidence of recurrence in the cervix. A plain abdominal X-ray showed multiple air fluid levels. In view of her rapidly deteriorating general condition, and with a presumptive diagnosis of intestinal obstruction, possibly due to adhesions occurring as a late complication of radiotherapy, she underwent emergency laparotomy. Intraoperatively, she was found to have a tumour in the transverse colon, which was infiltrating the serosa of the colon, obstructing the lumen. There were also a few omental deposits and scanty adhesions. She underwent a right hemicolectomy, which included the tumour, and omental deposits with an ileo-transverseostomy. Histology showed features of squamous cell carcinoma, involving serosa and muscularis propria, with no involvement of the mucosa (Figure 1). She was followed up after surgery, and thereafter, was disease-free for two years.

Discussion

Intestinal obstruction is a rare complication after pelvic radiotherapy.³ In a patient with carcinoma of the cervix, who has been treated with radiation, acute intestinal obstruction is most likely to be due to adhesions.³ However, there are other causes of intestinal obstruction, and our case study highlights a very rare cause of acute intestinal obstruction in carcinoma cervix.

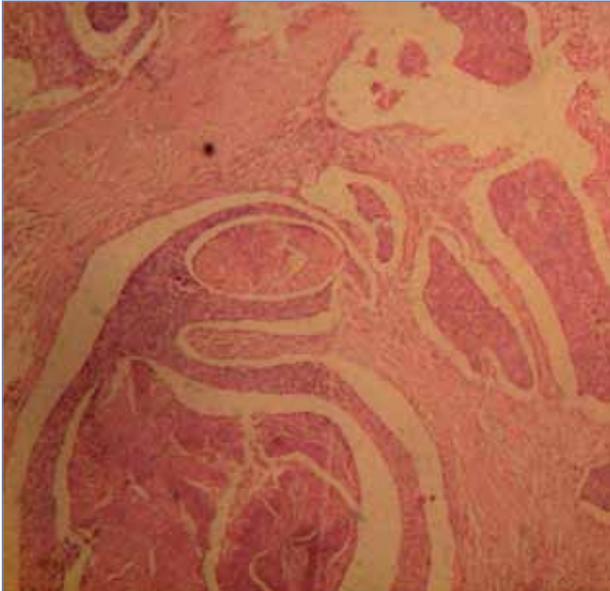


Figure 1: Carcinoma cervix metastasis in the serosa of the transverse colon

Metastasis to the gastrointestinal tract is extremely uncommon, occurring in less than four per cent of cases.⁴⁻⁶ Metastasis to the colon, from any malignancy, can either be transperitoneal, hematogenous, retrograde lymphatic, or by transluminal spread.⁴ Since the tumour was infiltrating the serosa, and sparing the mucosa, and because there were omental metastasis, in this case, the mode of metastatic spread must have been transperitoneal. Earlier reports have shown that in a metastatic deposit macroscopically, the tumour may either present as a mesenteric mass invading the bowel, or as an intramural mass ulcerating into the bowel.^{7,8} Secondary squamous cell carcinoma of the colon needs to be differentiated from a primary colonic squamous cell carcinoma, since the latter has a better prognosis.

Primary colonic squamous cell carcinoma is associated with the presence of associated carcinoma in situ, or squamous metaplasia in the adjacent mucosa,⁸ or other synchronous or metachronous colonic malignancies, adenomatous polyps, or ulcerative colitis, suggestive of a primary squamous cell carcinoma of the colon.^{5,8} In our patient, the mucosa was normal, without associated squamous metaplasia. For us, the limitation

was that computerised tomography (CT) could not be performed, as the patient rapidly deteriorated, and was sent for emergency laparotomy. CT of the abdomen would have revealed a colonic mass, but the management approach would not have been different. Metastasis to the colon from carcinoma cervix should be treated aggressively as the patient can remain disease-free for a long time. Our patient achieved good palliation after surgery, and remained disease-free for two years. An emergency laparotomy saved her from possible future intestinal perforation, which could have been fatal.

This report highlights an unusual cause of intestinal obstruction, and an even rarer site of metastasis from carcinoma cervix. Resection of the metastatic lesion palliated the acute intestinal obstruction, and possibly prevented a perforation, which could have been fatal. A contrast-enhanced CT scan of the abdomen and pelvis can be a valuable diagnostic aid in identifying other unusual causes of intestinal obstruction, post pelvic radiotherapy.

Declaration

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