Colonic metastasis from primary squamous cell carcinoma of the cervix

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Citation

Abstract
Metastasis from carcinoma of the uterine cervix to the gastrointestinal tract is uncommon and is usually associated with a poor prognosis. We report a case of a 50-year-old lady treated by concurrent chemoradiation for stage III B carcinoma of the uterine cervix. One and a half years later, she developed a metastatic growth in the transverse colon which was resected. She is disease free ten months after surgery. The colon is an unusual site of metastasis from carcinoma cervix, and colonic metastasis from carcinoma cervix has to be differentiated from a primary squamous cell carcinoma of the colon. Palliative resection of colonic metastasis may prevent future intestinal obstruction.

INTRODUCTION
Distant metastasis from carcinoma of the uterine cervix has been reported to occur in 9%-27% of patients treated by radiation[1-3]. The most common sites of metastasis are the lungs and paraortic nodes, whereas metastasis to the gastrointestinal tract is rare[2,3]. A metastatic squamous cell carcinoma in the colon must be differentiated from a primary squamous cell carcinoma of the colon since the later has a better prognosis. We have reported a case of squamous cell carcinoma of the cervix metastasizing to the colon and compared the histopathological features of the metastatic lesion with that of a primary squamous cell carcinoma of the colon.

CASE REPORT
A fifty year old lady with squamous cell carcinoma of the cervix (stage III B) was treated with concurrent chemoradiation in our institution. After three months, she developed a metastatic right inguinal node and received palliative radiation for the same. At the end of treatment, there was no residue in the cervix and no significant palpable inguinal nodes.

She was on regular follow-up for the next one and a half years when she was detected to have a mass in the abdomen. CT scan of the abdomen showed a mass in the transverse colon adherent to the anterior abdominal wall (Fig.1). Colonoscopy revealed a predominantly submucosal growth in the transverse colon, biopsy of which was reported as a squamous cell carcinoma. In view of the partly obstructing nature of the colonic tumor, she underwent resection of the transverse colon along with the adherent portion of the anterior abdominal wall. Histology showed features of squamous cell carcinoma in the submucosa (histologically similar to the

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primary tumor in the cervix and the inguinal node) with occasional foci of tumor in the lamina propria, infiltrating through the wall into the pericolic adipose tissue with metastasis to five pericolic nodes (Fig.2). The patient is asymptomatic six months after surgery.

**Figure 1**
Fig.1- CT scan showing tumor in the transverse colon

![CT scan showing tumor in the transverse colon](image)

**Figure 2**
Fig.2- Photomicrograph of: a) primary carcinoma cervix (H&E, 40x), b) metastatic squamous carcinoma in the colon (H&E, 40x), c) metastatic submucosal tumor in colon with focus of tumor (arrow) in the mucosa (H&E, 10x) and d) nodal metastasis (H&E, 40x)

![Photomicrograph of tumor](image)

**DISCUSSION**
The incidence of distant metastasis in stage III carcinoma of the cervix is around 35%-39%[2,3], the most common sites being the lungs or paraortic nodes. Metastasis to the gastrointestinal tract is extremely uncommon, occurring in less than four percent of cases[3]. Very few cases of metastasis to the colon have been reported in the literature[4-7]. Metastasis to the colon from any malignancy can occur by one of four methods - transperitoneal, hematogenous, retrograde lymphatic or transluminal[4]. In our case, since the pericolic nodes also showed metastasis and there were no other sites of metastasis, the mode of spread is most likely to be through the lymphatic system. Macroscopically, the tumor may either present as a mesenteric mass invading the bowel or as an intramural mass ulcerating into the bowel[4]. However, in our patient, the mucosa appeared to be intact and the bulk of the tumor was intramurally placed, narrowing the lumen and extending through the wall to the pericolic tissues.

Secondary squamous cell carcinoma of the colon needs to be differentiated from a primary squamous carcinoma arising in the colon since the former has a poorer prognosis. Presence of associated carcinoma in situ or squamous metaplasia in the adjacent mucosa, presence of other synchronous or metachronous colonic malignancy, adenomatous polyps or ulcerative colitis suggests a primary squamous carcinoma of the colon[5,8]. In primary squamous
cell carcinoma of the colon, malignant squamous cells arise in the mucosa and infiltrate transmurally with areas of squamous metaplasia or squamous carcinoma in-situ in the adjacent mucosa[8]. However, our patient with metastatic squamous carcinoma had malignant squamous cells predominantly in the submucosa with occasional focal infiltration into the mucosa without associated squamous metaplasia. These features, along with the recent history of treatment for carcinoma cervix conclusively proves the metastatic nature of the colonic lesion in the present case report.

This report highlights an unusual site of metastasis from carcinoma cervix. Resection of the metastatic lesion may help palliate acute intestinal obstruction or prevent this complication.

References
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