Colonic metastasis from primary squamous cell carcinoma of the cervix

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Abstract

Metastasis from carcinoma of the uterine cervix to the gastrointestinal tract is uncommonand is usually associated with a poor prognosis. We report a case of a 50-year-old lady treated byconcurrent chemoradiation for stage III B carcinoma of the uterine cervix. One and a half yearslater, 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 carcinomacervix, 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

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

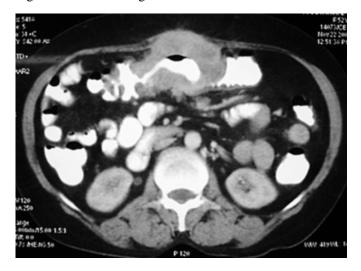
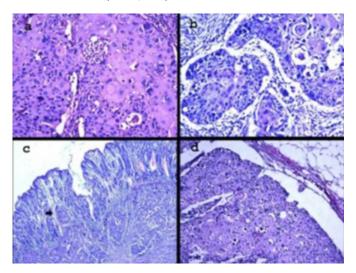


Figure 2

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)



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

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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

1. Ota T, Takeshima N, Tabata T, Hasumi K, Takizawa K. Treatment of squamous cell

carcinoma of the uterine cervix with radiation therapy alone: long term survival, late

complications, and incidence of second cancers. Br J Cancer 2007; 97:1058-62.

2. Hong JH, Tsai CS, Lai CH, Chang TC, Wang CC, Chou HH et al. Recurrent squamous

cell carcinoma of cervix after definitive radiotherapy. Int J Radiation Oncol Biol Phys.

2004; 60:249-57.

3. Fagundes H, Perez CA, Grigsby PW, Lockett MA. Distant metastases after irradiation

alone in carcinoma of the uterine cervix. Int J Radiation Oncol Biol Phys. 1992; 24:197-

204

4. Fraser AM, Morgan MN. Secondary carcinoma from the cervix involving the large

bowel. Br J Surg 1969; 56:317-8.

5. McMahon AJ. Squamous carcinoma of the colon: primary or metastatic? Eur J Surg

Oncol 1991; 17:397-402.

6. De Jode LR. A case of metastatic carcinoma of the ileocaecal valve presenting as a

primary growth. Br J Surg 1959; 46:505-6.

7. Kodama J, Hongo A, Mizutani Y, Miyagi Y, Yoshinouchi M, Kudo T. A rare case of

solitary metastasis of cervical cancer to the colon after radiation therapy. Eur J Gynaecol

Oncol. 1999; 20:281-2.

8. Ganesh MS, Ayyappan S, Majhi U. Squamous cell carcinoma of the ascending colon. A

case study. Indian J Cancer 1999; 36:190-1.

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