

Gastric metastasis from cervix cancer: a case report

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Key words

Cervix cancer • Cervix metastases • Gastric metastases • Gastric ulcer • Gastric bleeding

Summary

Gastric metastasis by solid tumor cancer is a rare event. Concomitant metastases to other organs are frequent, so that this condition is often associated to a poor prognosis. Upper gastrointestinal bleeding and anemia are the most common presenting symptoms. We present the case of a 81 years old women previously treated

for cervix carcinoma showing later a stomach metastasis. The patient is alive and disease free 39 months after salvage gastrectomy. A radical surgery in selected patients could be useful for symptom palliation and prolonged survival.

Introduction

Gastric metastasis by solid tumors is a rare event. The most common primary sites are the lung, breast, skin (melanoma) ^{1,2} and esophagus ³.

The most frequent presenting symptoms are upper gastrointestinal bleeding and anemia ^{1,3,4}. We present the case of a patient previously treated for cervix carcinoma showing a stomach metastasis, with symptoms and disease control improved by total gastrectomy.

Case report

A 81 years old women underwent in January 2012 to radical hysterectomy for poor differentiated carcinoma of cervix uteri (Fig. 1), pathological stage according to International Federation of Gynecology and Obstetrics (FIGO) IIA2 ⁵, with vascular invasion and vaginal surgical margin involved. Pre-operative chest x-ray was normal; post-operative abdomen computerized tomography (TC) detected a right pelvic 2.5 cm lymph node metastasis. The patient was treated with daily pelvic external beam radiotherapy, 5 fractions per week, up to 50.4 Gy to the pelvis and residual vagina, and up to 54 Gy to the pelvic lymph node metastasis, 1.8 Gy per fraction.

The residual vagina was also later treated with endocavitary high dose rate brachytherapy boost up to 12 Gy in 3 fraction of 4 Gy delivered in a week. The treatment was completed on June 2012.

In September 2012 chest and abdominal TC and clinical evaluation showed no disease evidence. In November she came to the our Radiation Department for planned control showing marked pallor and strong fatigue, without other symptoms. Hematological count detected a marked anemia: hemoglobin was 4.5 g/dl. After blood transfusion, diagnostic work-up (esophagogastroduodenoscopy and colonoscopy) detected a gastric ulcerate lesion, 6 x 5 centimeter. Endoscopic biopsies showed squamous carcinoma. On 11 December 2012, under general anesthesia, a total gastrectomy with a standardized D2 lymph node dissection was performed. Neither intra- nor post-operative complication occurred. Then, the patient started to eat without any functional disorder. The histological examination showed gastric localization of poor differentiated squamous cervix carcinoma (Fig. 2); the examined 37 lymph nodes were uninvolved. Follow up consisted of regular clinical examinations, blood tests, chest x-ray, abdominal TC or 18-FDG total body positron emission tomography. At 50 months from primary surgery and 39 months from salvage surgery the patient is alive with good health and disease free.

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Fig. 1. Histological pictures of cervical cancer carcinoma. (1a) Squamous cells carcinoma of the cervix infiltrating sub-epithelial tissues. Scanning image (Hem-eos 4x); (1b) Squamous cells carcinoma of the cervix infiltrating sub-epithelial tissues. Scanning image (Hem-eos10x); (1c) Same specimen as 1a. Detail of the cytological features (Hem-eos 20x); (1d) Same specimen. High power view of the tumour (Hem-eos 40x).

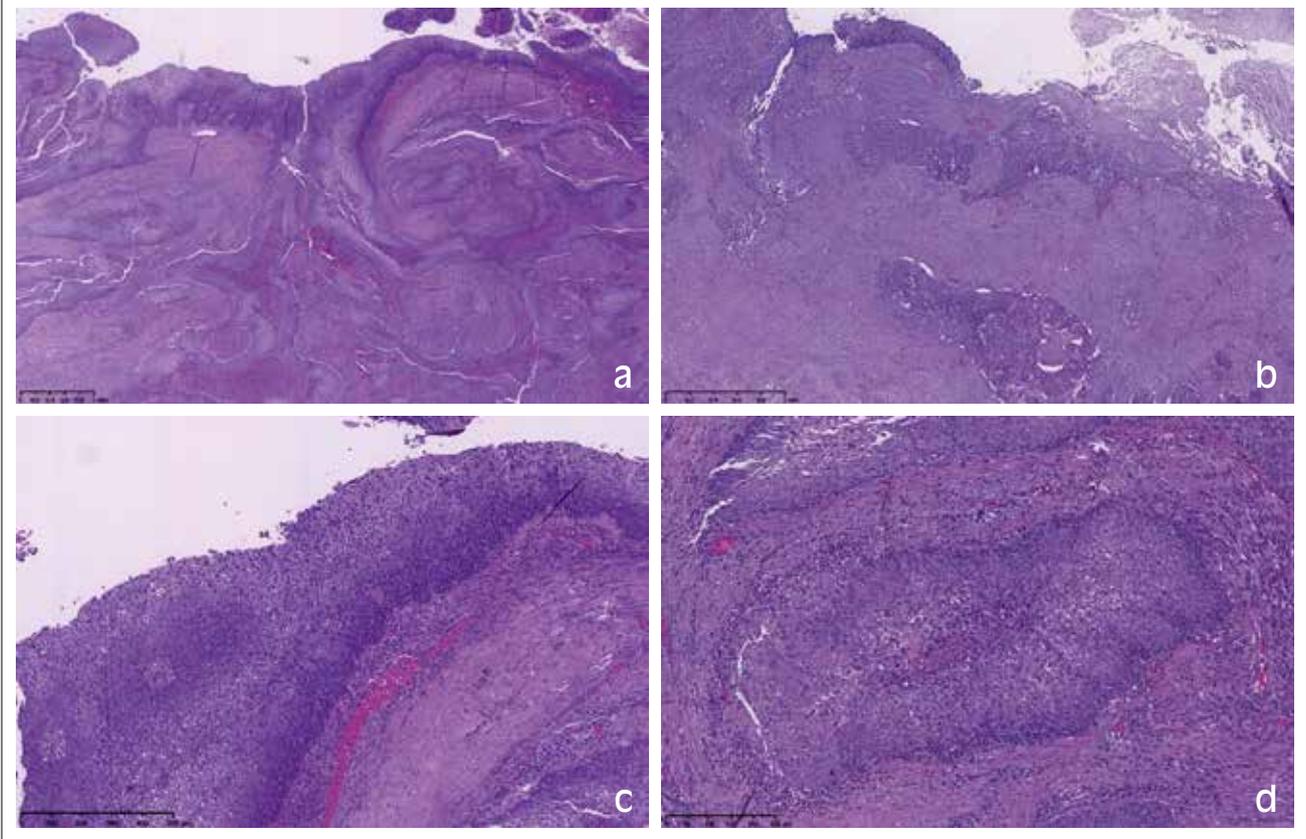
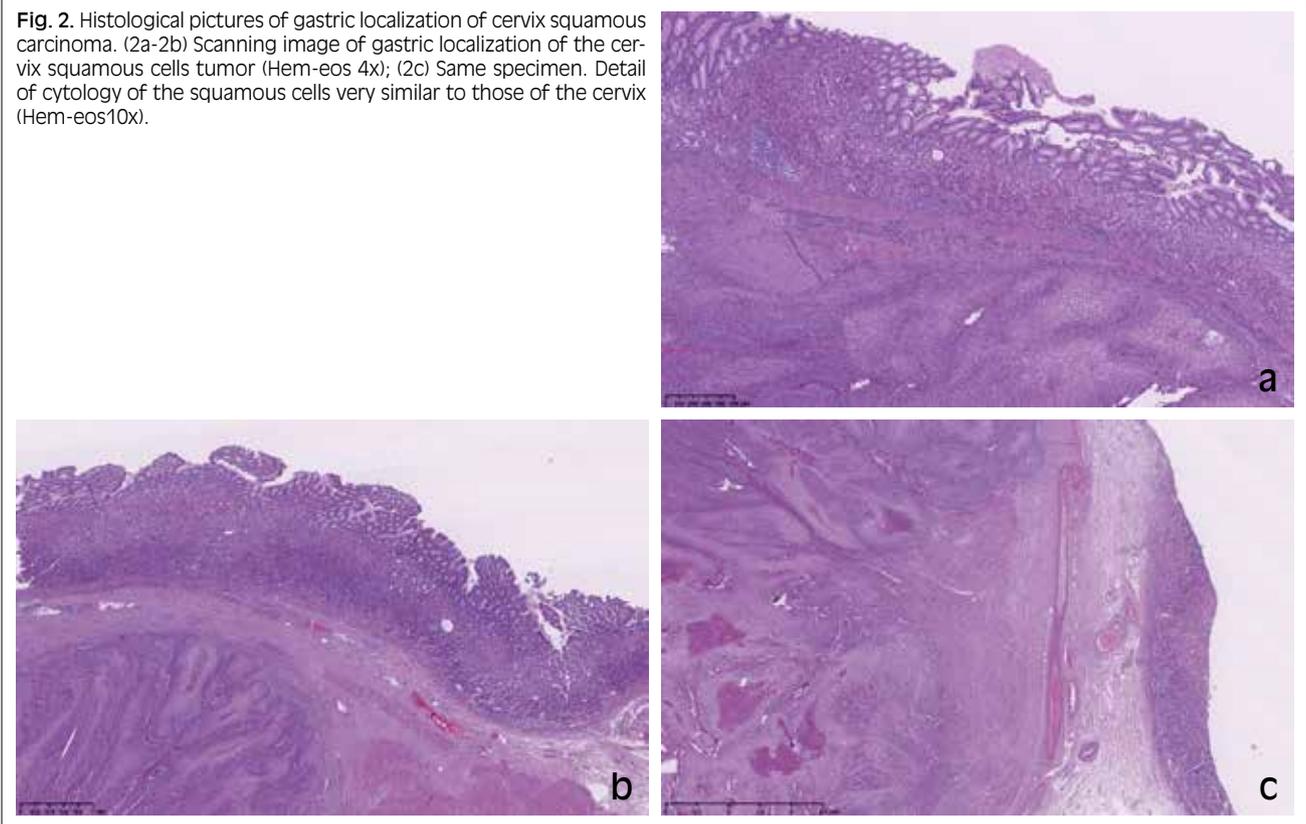


Fig. 2. Histological pictures of gastric localization of cervix squamous carcinoma. (2a-2b) Scanning image of gastric localization of the cervix squamous cells tumor (Hem-eos 4x); (2c) Same specimen. Detail of cytology of the squamous cells very similar to those of the cervix (Hem-eos10x).



Discussion

According to our knowledge, only 5 cases^{1-6,9} of gastric metastases by cervical cancer had been previously reported. Oda et al.³ described 19 cases of gastric metastases from uterus without distinguishing body from cervical cancers. As in most other reported cases, upper gastrointestinal bleeding and anemia were the presenting symptoms^{1,6}, and the time elapsed between the diagnosis of the primary tumor¹ or relapse to the primary site⁶, and diagnosis of metachronous gastric metastasis was less than 1 year. The macroscopic features observed by esophagogastroduodenoscopy are not specific of metastatic disease^{1,3}, so that an histological diagnosis is mandatory.

A surgical treatment, such as a partial gastrectomy, was performed in 2 previous cases by Journey et al.⁶ with a follow-up limited to 6 months, and by Campoli et al.¹ without data reported on the outcome of the specific patient, even if no patient survived longer than 14 months. The presence of concomitant metastases to other organs is frequent, so that this condition is often associated to a poor prognosis^{1,6}.

In our patient, the clinical evidence of a single site of disease led to an aggressive approach with a total gastrectomy despite advanced age, resulting in a symptoms palliation and a prolonged survival.

In this uncommon scenario there is not an evidence based recommended treatment due to a very limited number of previously reported cases.

Even if the conclusions getting from a single case reported have a poor evidence, data from also only one experiences could be helpful to know.

References

- ¹ Campoli PM, Ejima FH, Cardoso DM, et al. *Metastatic cancer to the stomach*. Gastric Cancer 2006;9:19-25.
- ² Menuck LS, Amberg JR. *Metastatic disease involving the stomach*. Am J Dig Dis 1975;20:903-13.
- ³ Oda I, Kondo H, Yamao T, et al. *Metastatic tumors to the stomach: analysis of 54 patients diagnosed at endoscopy and 347 autopsy cases*. Endoscopy 2001;33:507-10.
- ⁴ Hsu CC, Chen JJ, Changchien CS. *Endoscopic features of metastatic tumors in the upper gastrointestinal tract*. Endoscopy 1996;28:249-53.
- ⁵ Pecorelli S. *Revised FIGO staging for carcinoma of the vulva, cervix, and endometrium*. Int J Gynaecol Obstet 2009;105:103-4.
- ⁶ Journey RW, Gold H, Wyman NA, et al. *Unusual complications of cervical cancer: uremia and alkalosis due to gastric metastasis; report of a case*. Obstet Gynecol 1954;4:575-7.
- ⁷ Ivan'ko AI, Moloshok AA. *Metastasis of a cervical cancer to the gastrointestinal tract (1 case)*. Vopr Onkol 1982;28:99-100.
- ⁸ Jeladharan G, Subhalal N, Praseeda I. *Gastric ulcer due to metastasis from carcinoma cervix*. Indian J Gastroenterol 1992;11:88.
- ⁹ Schoeneich R. *Grid irradiation of a stomach metastasis from a cervix uteri carcinoma, with a report on successful, roentgen therapy of 6 further metastases in the same patient*. Strahlentherapie 1959;110:110-5.