Isolated gastric metastasis of endometrioid carcinoma: a case report and literature review

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Background: Isolated parenchymal gastric metastasis of endometrial cancer without other recurrence sites is extremely rare. This report presents a case of isolated gastric metastasis from endometrioid carcinoma characterized by a giant ulcer, which was managed with radical resection. Additionally, we review the recently published literature regarding isolated gastric metastases originating from ovarian and endometrial cancers.

Case Description: A 60-year-old female was admitted with discomfort in the upper abdomen accompanied by melena and a 6-year history of ovarian and endometrial cancer. Gastroscopy revealed a giant ulcer located in the gastric body, and biopsy pathology indicated a reproductive system origin. Subsequent ^{18}F-fluorodeoxyglucose positron emission tomography/computed tomography (^{18}F-FDG PET/CT) revealed a hypermetabolic lesion within the gastric wall on the lesser curvature [standardized uptake value (SUV): 23.23]. Final pathology following total gastrectomy confirmed the presence of an isolated gastric metastasis tumor originating from primary endometrial endometrioid carcinoma. The patient was discharged 11 days postsurgery and exhibited no signs of recurrence or metastasis during a 3-month postoperative follow-up.

Conclusions: Early diagnosis and treatment are paramount for identifying metastatic gastric lesions. If surgery is feasible and safe, cytoreductive surgery followed by adjuvant chemotherapy represents an effective and widely endorsed treatment approach, significantly improving patient prognosis and enhancing long-term survival rates.

Keywords: Endometrioid carcinoma; gastric metastasis; giant ulcer; case report

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Introduction

Isolated gastric metastatic carcinoma is exceedingly rare; in three large autopsy series, the incidence of gastric metastatic carcinoma was reported to be as low as 0.54–1.7%, whereas the antemortem diagnosis through clinical endoscopic studies was even lower at 0.2% (1). In this case, the synchronous occurrence of low-grade endometrioid carcinoma in the endometrium and ovary remains controversial; however, the 2023 International Federation of Gynecology and Obstetrics (FIGO) staging provides clear guidance on this matter (2). Nevertheless, isolated gastric metastases from primary ovarian or endometrial cancer are exceedingly rare. This article presents a case of isolated gastric metastasis originating from endometrioid carcinoma, manifesting as a giant ulcer infiltrating liver tissue. The diagnosis was confirmed through histological and immunohistochemical analyses conducted post-surgery. This case report aims to augment clinicians' understanding of this condition, thereby facilitating early diagnosis

and treatment. We present this case in accordance with the CARE reporting checklist (available at https://acr.amegroups.com/article/view/10.21037/acr-24-217/rc).

Case presentation

As the timeline shows (*Figure 1*), in May 2024, a 60-year-old female was admitted to the hospital due to nonspecific upper abdominal pain accompanied by melena. Six years earlier, the patient had undergone total hysterectomy, bilateral salpingectomy, pelvic lymphadenectomy, para-aortic lymph node dissection, and omentectomy for ovarian and endometrial cancer. Histological examination revealed moderately to poorly differentiated endometrioid carcinoma (stage IA) of the endometrium, with shallow myometrial invasion; the right ovary had moderately differentiated endometrioid carcinoma [stage IC (2009 FIGO)], with extension into the left ovary. There was no evidence of cancer invasion in either fallopian tube, and no lymph node metastasis was detected (0/17). The patient received four cycles of adjuvant chemotherapy with a paclitaxel and carboplatin regimen. Follow-up examinations revealed no tumor recurrence.

Current laboratory tests revealed mild anemia hemoglobin (HGB): 9.5 g/dL, and upper gastrointestinal endoscopy revealed a large, irregular ulcerative lesion in the gastric body, with a necrotic base and surrounding mucosal elevation (*Figure 2*). Endoscopic biopsy pathology revealed adenocarcinoma components, with immunohistochemical staining indicative of a gynecological origin. The immunohistochemistry results were as follows: cytokeratin 7 (CK7+), cytokeratin 20 (CK20–), Wilms' tumor 1 (WT1–), cancer antigen 125 (CA125+), estrogen receptor (ER+), paired box 8 (PAX-8 +), Villin (+), and caudal type homeobox 2 (CDX2–). The test results revealed the following—carcinoembryonic antigen (CEA): 0.329 ng/mL, CA125: 12.0 U/mL, and cancer antigen 153 (CA153): 5.34 U/mL. To rule out systemic metastasis, an ^{18}F-fluorodeoxyglucose positron emission tomography/computed tomography (^{18}F-FDG PET/CT) scan was performed, which revealed localized thickening of the gastric wall on the lesser curvature of the gastric body with intense FDG uptake and a maximum standardized uptake value (SUV) of 23.23 (*Figure 3A*). Abdominal transverse CT revealed irregular thickening of the gastric wall, with the thickest part measuring approximately 2.1 cm. The enhanced scan revealed mild persistent enhancement (*Figure 3B*), with no evidence of metastatic disease elsewhere.

The tumor was located in the upper part of the gastric body, near the cardia, and was characterized by infiltrative growth and extensive involvement. The patient subsequently underwent total gastrectomy, Roux-en-Y esophagojejunostomy, partial hepatectomy, and D2 lymphadenectomy. Intraoperatively, we found that both the mucosa and serosa of the gastric wall were involved, with tumor infiltration into the left hepatic lobe (*Figure 4*), without the detection of enlarged lymph nodes in the gastric antrum. Postoperative paraffin pathology revealed a large ulcerative tumor on the anterior gastric wall measuring 8 cm × 7.5 cm × 1.2 cm, with a gray-white firm cut surface infiltrating the full thickness of the gastric wall. Microscopic examination (*Figure 5A*,*5B*) and immunohistochemical marker analysis supported the diagnosis of metastatic low-grade endometrioid adenocarcinoma. No lymph node metastasis was found (0/25). The immunohistochemistry results were as follows: CK7 (partial+, *Figure 5C*), PAX-8 (+, *Figure 5D*), ER (partial+, *Figure 5E*), progesterone

Highlight box

Key findings

- Endometrial endometrioid carcinoma may manifest as isolated gastric metastasis characterized by a large ulcer, which is managed through radical resection. In patients with a history of ovarian and endometrial cancer, gastric lesions may signify secondary metastases from these malignancies.

What is known and what is new?

- Common sources of gastric metastases include breast cancer, lung cancer, esophageal cancer, renal cell carcinoma, and malignant melanoma. Isolated gastric metastasis from ovarian and endometrial cancers is exceedingly rare, and the mechanisms underlying this metastasis remain unclear.
- Our novel finding indicates that the postoperative pathology diagnosed the patient with isolated gastric metastasis originating from endometrial endometrioid carcinoma. If surgery is feasible and safe, cytoreductive surgery followed by adjuvant chemotherapy represents an effective and widely endorsed treatment approach, significantly improving patient prognosis and enhancing long-term survival rates.

What is the implication, and what should change now?

- This is the first reported case in the English literature of isolated gastric metastasis from endometrioid carcinoma characterized by a giant ulcer, managed through radical resection. Patients with isolated gastric metastases may derive significant benefit from complete cytoreductive surgery. This case report aims to augment clinicians' understanding of this condition, thereby facilitating early diagnosis and treatment.

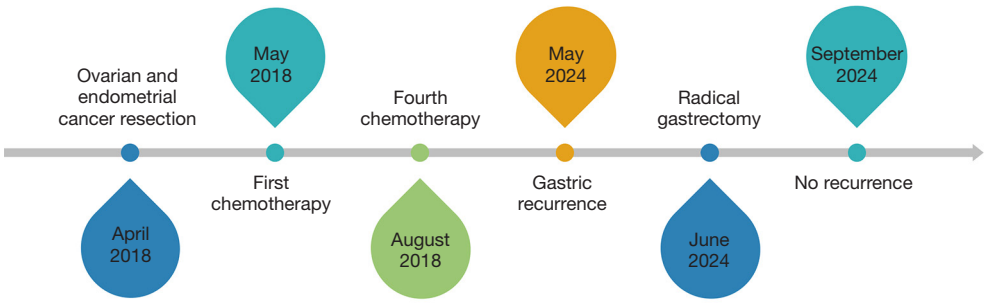

Figure 1 Timeline for patient with gastric metastasis of endometrioid carcinoma.

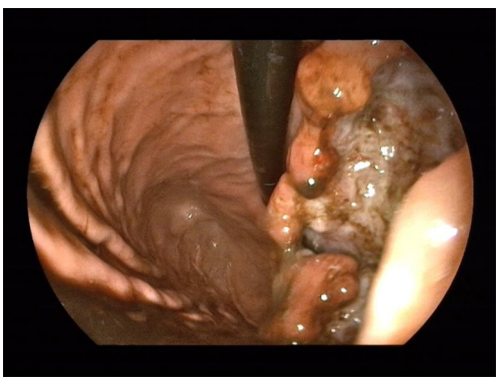

Figure 2 A large irregular ulcerative lesion was observed in the gastric body, with a necrotic base and surrounding mucosal elevation, covering an area larger than 5.0 cm × 4.0 cm.

receptor (PR, partial+, *Figure 5F*), CK20 (–, *Figure 5G*), GATA binding protein 3 (GATA3 scattered weak+, *Figure 5H*), P53 (50%+, *Figure 5I*), Villin (–), Ki67 (60%+), CDX2 (–), Cadherin17 (–), WT1 (–), and P16 (partial+). Both the gastric tumor and the ovarian and endometrial cancers were positive for CK7, ER, PR, PAX-8, P53, and P16 but negative for CK20, WT1, and CDX2. The immunohistochemical staining results supported the final diagnosis of metastatic endometrioid carcinoma to the stomach. A postoperative review on day 7 revealed HGB 98 g/L, CEA 0.8 ng/mL, CA125 35.40 U/mL, and CA153 4.20 U/mL. The postoperative course was uneventful, and the patient was discharged on postoperative day 11. To date, no signs of recurrence or metastasis have been observed during the 3-month postoperative follow-up. The patient has a favorable prognosis and has undergone subsequent chemotherapy. All procedures performed in this study were in accordance with the ethical standards of the national research committees and with the Declaration of Helsinki (as revised in 2013). Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the editorial office of this journal.

Discussion

There is debate regarding synchronous primary tumors of the endometrium and ovary. The distinction between low-grade endometrioid carcinoma (stage IA3) involving the endometrium and ovary and endometrial carcinoma with extensive ovarian metastasis (stage IIIA1) is crucial. The 2023 FIGO staging provides clear criteria: low-grade endometrioid adenocarcinoma can be classified as stage IA3 if it meets the following criteria: (I) myometrial invasion <1/2; (II) no extensive lymphovascular space invasion (LVSI); (III) no other metastases; and (IV) a unilateral ovarian tumor confined to the ovary in the absence of capsular invasion or rupture. Patients who do not meet these criteria are classified as having widespread ovarian metastasis of endometrial carcinoma (stage IIIA1) (2). This patient was diagnosed with ovarian and endometrial cancer six years ago. According to the 2009 FIGO staging, stage IA is defined as a tumor confined to the endometrium or with <1/2 myometrial invasion (3). However, under the updated 2023 FIGO staging system, this patient was classified as having stage IIIA1 endometrial endometrioid carcinoma.

This article describes a case of isolated gastric recurrence six years after the initial diagnosis of primary ovarian and endometrial cancer. The patient presented with chronic melena and underwent gastroscopy, revealing a large ulcerative lesion in the gastric body. Biopsy pathology and immunohistochemistry supported a diagnosis of endometrioid carcinoma with metastasis to the stomach. PET/CT confirmed isolated gastric metastasis. Postsurgical histology and immunohistochemistry [ER(+), PR(+),

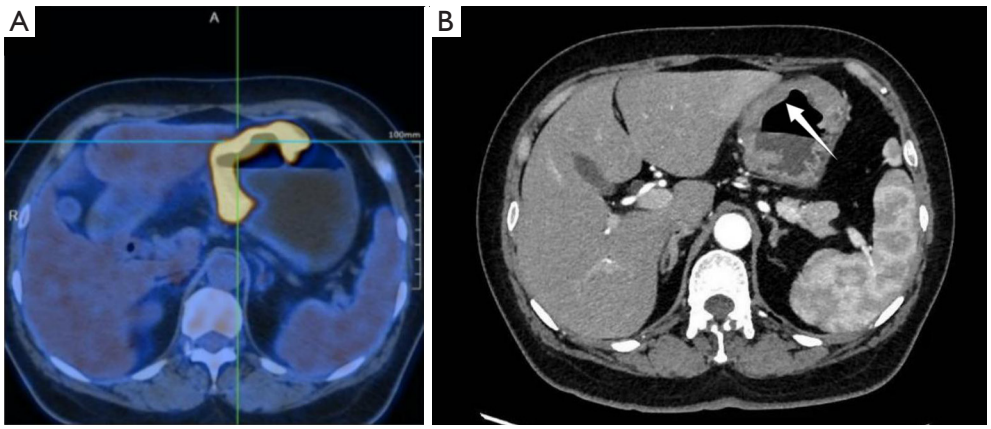

Figure 3 ^{18}F-FDG PET/CT and transverse CT. (A) ^{18}F-FDG PET/CT scan showing localize abnormal thickening of the gastric wall on the lesser curvature, with hypermetabolism of glucose and a maximum SUV value of 23.23. (B) Transverse CT scan showing uneven thickening of the gastric body wall, with the thickest part measuring approximately 2.1 cm, and mild persistent enhancement on contrast-enhanced scanning. The arrow points at the gastric lesion. ^{18}F-FDG PET/CT, ^{18}F-fluorodeoxyglucose positron emission tomography/computed tomography; SUV, standardized uptake value.

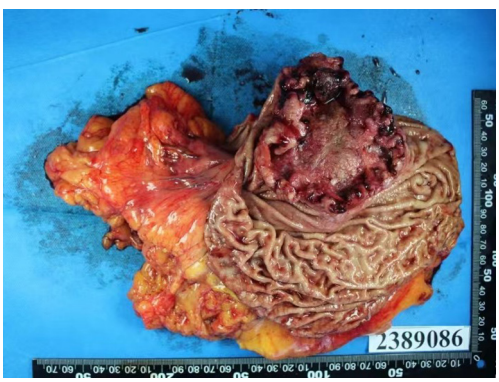

Figure 4 Gross appearance of the tumor after excision. A large ulcerative tumor was observed on the anterior gastric wall, measuring 8 cm × 7.5 cm × 1.2 cm, with a gray-white firm cut surface, infiltrating the full thickness of the gastric wall.

CK7(+), and PAX-8(+)] further supported the diagnosis of endometrioid carcinoma. This case met the diagnostic criteria for isolated gastric metastasis from primary endometrial endometrioid carcinoma. Gastric metastases are most commonly observed in patients with breast cancer, lung cancer, esophageal cancer, renal cell carcinoma, and malignant melanoma. The incidence rates of gastric metastasis from breast and lung cancer are 3.6% and 1.3%, respectively (4,5). The extreme rarity of isolated gastric metastases from ovarian and endometrial cancer has led to a limited number of reported clinical cases, and no studies have analyzed their incidence and mechanisms of metastasis.

We conducted a comprehensive review of all reported cases of isolated gastric metastasis from ovarian and endometrial cancer. As of September 2024, 10 English-language case reports have been identified in PubMed (*Table 1*). In this case, and the 10 reported cases, the age of onset ranged from 42 to 72 years (median: 60 years). Histologically, serous adenocarcinoma accounted for the majority of tumors (6 patients), with only 3 cases of endometrioid carcinoma. Besides this case, the other 2 cases had gastric metastasis from endometrial cancer (5,6), and most had FIGO stage III disease. The time from initial surgery to recurrence ranged from 0 to 144 months (median: 36 months). Two patients had lesions in the upper third of the stomach, one had lesions in the middle third, and seven had lesions in the lower third. The average survival time after the diagnosis of isolated gastric metastasis was 8 months. Ovarian and endometrial cancers may metastasize to other organs, including the stomach, via hematogenous spread without evidence of peritoneal metastasis. Despite the rich blood supply to the stomach, there are no reports clearly detailing hematogenous metastasis of the stomach from distant organs (7). Gastric metastatic tumors are usually located in the submucosa, where they form nodules or plaques with clear borders. Ulceration occurs only when the lesion enlarges, resulting in diminished blood supply to the center, mucosal involvement, or erosion of the overlying mucosa (8). Gastric metastatic tumors are usually located in the submucosa, where they form nodules or plaques

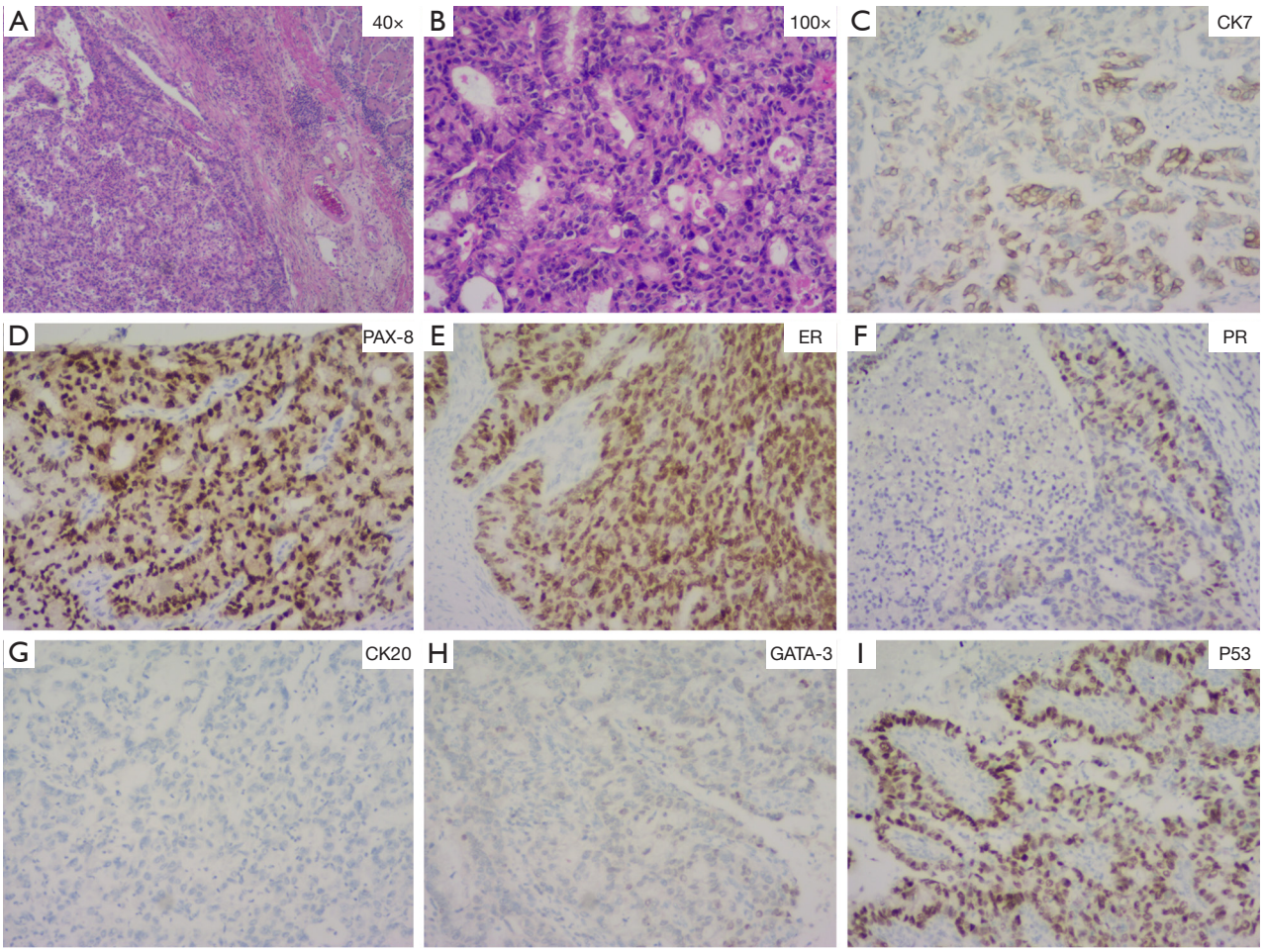

Figure 5 Histological and immunohistochemical findings. Low magnification showed tumor infiltration through the entire thickness of the gastric wall (A, hematoxylin & eosin slide, ×40). The tumor consisted of irregular clusters of cells with significant nuclear atypia (B, hematoxylin & eosin slide, ×100). Immunohistochemistry demonstrated that the tumor cells were immunoreactive for CK7 (C, ×100), PAX-8 (D, ×100), ER (E, ×100), PR (F, ×100), GATA-3 (H, ×100), and P53 (I, ×100), but non-reactive for CK20 (G, ×100). CK7, cytokeratin 7; PAX-8, paired box 8; ER, estrogen receptor; PR, progesterone receptor; GATA-3, GATA binding protein 3; CK20, cytokeratin 20.

with clear borders. Ulceration occurs only when the lesion enlarges, resulting in diminished blood supply to the center, mucosal involvement, or erosion of the overlying mucosa (5,9-11). Early diagnosis has become an essential part of treatment. Elevated serum CA125 levels and abnormal imaging findings can provide diagnostic clues for tumor recurrence. FDG PET/CT scans can detect the site of recurrence and systemic metastasis early on. In this case, FDG PET/CT imaging revealed a hypermetabolic lesion in the gastric body, and the literature supports the use of FDG PET/CT in postoperative surveillance (12). However, the final distinction between primary gastric cancer and metastatic gastric cancer still relies on biopsy pathology and immunohistochemistry.

Histological and immunohistochemical evaluations are instrumental in distinguishing metastatic gastric cancer from gastric adenocarcinoma. Endometrioid carcinoma typically stains positive for PAX-8, ER, PR, and vimentin and negative for p53, p16, CK20, CEA, and HNF-1B. On the other hand, gastric adenocarcinoma usually stains positive for CK20, CDX2, MUC2, MUC5AC, and CK5/6, and negative for ER, PR, GATA3, and E-cadherin (5). Positive expression of PAX-8 is indicative of metastatic endometrioid carcinoma, and its value in distinguishing between endometrioid carcinoma and gastric cancer has been confirmed in the literature (6). Positive staining for

Table 1 Literature review

Authors	Age (years)	Histological type	Stage	IPM (months)	Symptoms	Tumor size (cm)	Ulcer	Serum CA125	Immunohistochemistry	Tumor location	Follow up after gastric metastasis
Zhou *et al.* (4)	61	Serous, G3	NA	144	Asymptomatic	2.4×3	+	High	CA125+, ER+, CK7+, WT1+, PR–, CK20–, CDX2–	L	5 months, NED
Lundeberg *et al.* (5)	72	Endometrial endometrioid adenocarcinoma	IIIA	36	Fatigue, melena	NA	–	High	NA	U	8 months, DOD
Cui *et al.* (6)	42	Endometrial endometrioid adenocarcinoma, FIGO 3	I	3	Asymptomatic	4.4	NA	NA	AE1/3+, CAM2+, S100–, LAC–, CDX2–, PAX-8+, ER+, PR+	NA	2 months, NED
Jung *et al.* (7)	49	Serous	≥IIB	52	Asymptomatic	2.5×2.5	–	High	NA	L	18 months, NED
De Wide *et al.* (8)	55	Serous	≥IIIb	20	Asymptomatic	1.5	–	NA	NA	L	NA
Sangha *et al.* (9)	62	Poorly differentiated carcinoma	NA	84	Belching, reflux, discomfort	4	+	High	CA125+, CK7-AE1/AE3+, CK7+, CK20–, vimentin–, CD117–, CEA–	U	NA
Yang *et al.* (10)	47	Serous	IIA	25	Abdominal pain	3.6×2.8	–	N	NA	L	8 months, NED
Namikawa *et al.* (11)	63	Serous	NA	72	Asymptomatic	NA	+	NA	CA125+, ER+, PR+	L	9 months, DOD
Pernice *et al.* (12)	42	Serous, G3	IIIC	15	Asymptomatic	7	NA	High	NA	L	12 months, NED
Nikas *et al.* (13)	61	Adult type granulosa cell tumors	NA	0	Asymptomatic	NA	–	NA	α-inhibin+, calretinin+, CD56+, chromogranin–, synaptophysin–, CD117–, DOG1–	L	NA
Present case	60	Endometrial endometrioid adenocarcinoma	IIIA	144	Epigastric pain, melena	8×7.5	+	N	CK7+, CK20–, Villin–, Ki67 (60%+), PAX8+, CDX2–, Cadherin17–, WT1–, ER+, PR+, GATA3+, P16+, P53 (50%+)	M	3 months, NED

CA125, cancer antigen 125; CEA, carcinoembryonic antigen; CK, cytokeratin; DOD, died of disease; ER, estrogen receptor; IPM, interval between the treatment of the primary tumor and the diagnosis of metastatic tumor in the stomach; L, lower third of the stomach; M, middle third of the stomach; NA, not available; N, normal; NED, no evidence of disease; PR, progesterone receptor; U, upper third of the stomach; WT1, Wilms' tumor 1; FIGO, International Federation of Gynecology and Obstetrics.

CK14 and CK18 is indicative of squamous cell carcinoma and adenocarcinoma of the lung, respectively. Additionally, positive thyroid transcription factor 1 (TTF1) staining is associated with a thyroid or lung tumor origin (14). Commonly utilized markers for identifying breast origin include mammaglobin, gross cystic disease fluid protein 15 (GCDFP-15), and GATA3 (15).

Endoscopy can be used to monitor gastrointestinal metastasis, and endoscopic ultrasound-guided fine-needle aspiration (EUS-FNA) is a minimally invasive method for diagnosing metastatic gastric cancer. It provides high accuracy in the preoperative histological diagnosis and staging of gastrointestinal cancer, aiding in the correct diagnosis of submucosal gastric lesions. However, these lesions must be differentiated from low-grade malignant neoplasms that arise in the submucosal or muscular layers, including gastric neuroendocrine tumors (NETs), gastrointestinal stromal tumors (GISTs), leiomyomas, and schwannomas (13). Early submucosal tumors (SMT) without ulcer formation in metastatic gastric cancer can be treated with endoscopic submucosal dissection (ESD) and enucleation (7). The optimal long-term survival approach for patients with metastatic ovarian cancer is complete cytoreductive surgery. Cytoreductive surgery for recurrent ovarian cancer is an independent prognostic factor (10). For breast cancer with gastric metastasis, both chemotherapy and hormonal therapy have been shown to improve survival outcomes and quality of life (16). For patients with resectable primary lung cancer accompanied by solitary gastric metastasis, surgical resection is a viable option that should be considered (14). Cytoreductive surgery followed by adjuvant chemotherapy represents an effective and widely recommended treatment strategy for confirmed solitary gastric metastasis. To our knowledge, this is the first case in the English literature to report isolated gastric metastasis from endometrioid carcinoma with a giant ulcer treated by radical resection.

Conclusions

In conclusion, although gastric metastasis of endometrioid carcinoma is extremely rare, clinicians should remain vigilant. For patients with a history of ovarian and endometrial cancer, gastric lesions may represent secondary metastasis from these malignancies. For solitary metastatic gastric lesions, early diagnosis and treatment are critical. If surgery is feasible and safe, cytoreductive surgery followed by adjuvant chemotherapy represents an effective and widely endorsed treatment approach, significantly improving patient prognosis and enhancing long-term survival rates.

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Footnote

Reporting Checklist: The authors have completed the CARE reporting checklist. Available at https://acr.amegroups.com/article/view/10.21037/acr-24-217/rc

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Conflicts of Interest: All authors have completed the ICMJE uniform disclosure form (available at https://acr.amegroups.com/article/view/10.21037/acr-24-217/coif). The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All procedures performed in this study were in accordance with the ethical standards of the national research committees and with the Declaration of Helsinki (as revised in 2013). Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the editorial office of this journal.

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References

1. McCluggage WG, Bosse T, Gilks CB, et al. FIGO 2023 endometrial cancer staging: too much, too soon? Int J Gynecol Cancer 2024;34:138-43.
2. Zullo A, Balsamo G, Lorenzetti R, et al. Gastric metastases from gynaecologic tumors: case reports and review of the literature. Ann Transl Med 2016;4:483.
3. Creasman W. Revised FIGO staging for carcinoma of the endometrium. Int J Gynaecol Obstet 2009;105:109.
4. Zhou JJ, Miao XY. Gastric metastasis from ovarian carcinoma: a case report and literature review. World J Gastroenterol 2012;18:6341-4.
5. Lundeberg K, Wolford J, Reid T. Gastric mucosa as a rare recurrence location of endometrial endometrioid adenocarcinoma. Gynecol Oncol Rep 2024;53:101390.
6. Cui M, Zhang X, Harpaz N. Isolated Gastric Metastasis of Endometrial Adenocarcinoma: First Case Report and Review of Pertinent Literature. Gastroenterology Res 2018;11:422-5.
7. Jung HJ, Lee HY, Kim BW, et al. Gastric Metastasis from Ovarian Adenocarcinoma Presenting as a Submucosal Tumor without Ulceration. Gut Liver 2009;3:211-4.
8. De Wilde V, Voet D, Dhont M, et al. Ultrasound diagnosis of a solitary gastric metastasis. J Clin Ultrasound 1989;17:678-81.
9. Sangha S, Gergeos F, Freter R, et al. Diagnosis of ovarian cancer metastatic to the stomach by EUS-guided FNA. Gastrointest Endosc 2003;58:933-5.
10. Yang S. Gastric metastasis of ovarian serous cystadenocarcinoma. Int Med Case Rep J 2018;11:201-4.
11. Namikawa T, Kobayashi M, Hanazaki K. Metastatic gastric tumor arising from ovarian cancer. Gastrointest Endosc 2014;79:332-3.
12. Pernice M, Manci N, Marchetti C, et al. Solitary gastric recurrence from ovarian carcinoma: a case report and literature review. Surg Oncol 2006;15:267-70.
13. Nikas IP, Sepsa A, Kleidaradaki E, et al. EUS-FNA Diagnosis of a Metastatic Adult Granulosa Cell Tumor in the Stomach. Lab Med 2022;53:533-6.
14. Shih-Chun C, Shih-Chiang H, Chun-Yi T, et al. Non-small cell lung cancer with gastric metastasis and repeated gastrointestinal bleeding: A rare case report and literature review. Thorac Cancer 2021;12:560-3.
15. Gown AM, Fulton RS, Kandalaft PL. Markers of metastatic carcinoma of breast origin. Histopathology 2016;68:86-95.
16. Rech MB, da-Cruz ER, Salgado K, et al. Metastatic gastric cancer from breast carcinoma presenting with paraneoplastic rheumatic syndrome: A case report. World J Clin Cases 2023;11:3282-7.

doi: 10.21037/acr-24-217
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