



Case Report

Gastric-Type Cervical Adenocarcinoma Presenting as a Giant Adnexal Mass

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Citation: Abdalla D, Alla SBD, Mahamad SMS, Wagiallah MWO, Malek A (2025) Gastric-type Cervical Adenocarcinoma Presenting as a Giant Adnexal Mass. Gynecol Obstet Open Acc 9: 257. DOI: <https://doi.org/10.29011/2577-2236.100257>

Received Date: 17 November 2025; **Accepted Date:** 18 November 2025; **Published Date:** 25 November 2025

Abstract

A 53-year-old woman presented with an eight-month history of recurrent abdominal pain, culminating in the discovery of a large complex adnexal mass. Operative staging revealed HPV-independent gastric-type cervical adenocarcinoma with bilateral ovarian involvement, a rare and aggressive variant of cervical cancer. We discuss the diagnostic challenges, surgical findings, histopathology, and therapeutic implications in the context of current literature.

Introduction

Cervical adenocarcinomas account for 10-25% of cervical cancers, with gastric-type adenocarcinoma (GAS) representing a rare HPV-independent subtype. GAS is associated with aggressive behaviour, advanced stage at diagnosis, and poorer prognosis compared to HPV-associated adenocarcinomas. Ovarian involvement is rare but has been documented, often mimicking primary ovarian neoplasms. This report describes a case of Stage IVA GAS, initially suspected to be ovarian cancer, highlighting the importance of considering rare cervical malignancies in the differential diagnosis of adnexal masses.

Case Presentation

Patient profile: A 53-year-old postmenopausal woman was admitted in February 2025 with an eight-day history of right-sided abdominal pain, following over 30 similar intermittent episodes since August 2024. Associated symptoms included reduced appetite, intermittent nausea, and low-grade fever.

Past medical history: Gastric reflux, arthritis, COPD, gallbladder polyp, hepatic haemangioma, COVID-19 infection (2011). Regular naproxen and omeprazole. Surgical history included three caesarean sections, tonsillectomy, adenoidectomy, grommet insertion, dilation & curettage with Mirena insertion, and tubal ligation. Allergic to amoxicillin, smoker (10–15/day × 28 years), social alcohol.

Examination:

Haemodynamically stable, NEWS 0. Abdominal exam revealed mild distension with right iliac fossa and right upper quadrant tenderness, no peritonism.

Investigations:

- Bloods: WCC $8.4 \times 10^9/L$, CRP $< 5 \text{ mg/L}$, LFTs and renal profile normal.

- CT abdomen/pelvis: 18 cm complex right adnexal mass, bilateral adrenal lesions (adenomas).

- Ultrasound: Right ovarian complex mass (136 × 112 × 170 mm) with vascularity; enlarged left ovary with multilocular cyst.

- Tumour markers: CA 19-9 elevated (635 U/mL), CA-125 mildly raised (43 U/mL), CEA elevated (6 µg/L), AFP and β-hCG normal.

MDT decision: High-risk adnexal lesion → recommended staging laparotomy.

Operative Findings

Midline laparotomy revealed a right ovarian cystic mass filling the abdomen, adherent to omentum. The left ovary was enlarged, with dense pelvic adhesions and 100 mL of straw-coloured ascites. Procedures performed: Total abdominal hysterectomy, bilateral salpingo-oophorectomy, and omentectomy. Estimated blood loss: 352 mL, mass removed intact.

Histopathology

Histology confirmed HPV-independent gastric-type cervical adenocarcinoma. The tumour measured 20 mm with 15 mm stromal invasion, involving the outer third of the cervix and extending to within 1 mm of the paracervical margin. Lymphovascular and perineural invasion were present. Both ovaries were involved; omentum and peritoneal washings were negative. According to the 2018 FIGO classification, this represented Stage IVA disease.

Postoperative Course

The patient recovered uneventfully. Postoperative CT excluded distant metastases. Bilateral adrenal lesions were confirmed as benign adenomas. She was referred to oncology for adjuvant chemoradiotherapy [1-7].

Discussion

Gastric-type adenocarcinoma (GAS) is an HPV-independent cervical adenocarcinoma, characterised by aggressive biology, chemoresistance, and poor outcomes. It is frequently diagnosed at an advanced stage, often with ovarian metastases mimicking

primary ovarian tumours. Serum CA 19-9 and CEA may be disproportionately elevated compared to CA-125, unlike typical ovarian carcinomas. Surgery with complete staging remains the cornerstone of management. Adjuvant chemoradiotherapy is indicated in stage IVA disease. Five-year overall survival for GAS is reported to be significantly lower than for HPV-associated adenocarcinomas (30–40% vs >70%).

Conclusion

This case highlights the diagnostic challenges of HPV-independent gastric-type cervical adenocarcinoma masquerading as ovarian malignancy. Recognition of atypical tumour marker profiles and careful pathological evaluation are crucial for diagnosis. Early suspicion and timely referral to oncology MDTs are essential for management, given the aggressive nature of this rare disease.

References

1. WHO Classification of Tumours Editorial Board. *Female Genital Tumours. WHO Classification of Tumours, 5th Edition, Volume 4.* Lyon: IARC; 2020.
2. Nishio S, et al (2019) Clinico pathological features of gastric-type mucinous adenocarcinoma of the uterine cervix. *Int J Gynecol Cancer* 29: 841–846.
3. Kojima A, et al (2007) Ovarian metastasis in gastric-type cervical adenocarcinoma. *Histopathology* 50: 525–534.
4. Karamurzin YS, Takako Kiyokawa, Vinita Parkash, Anjali R Jotwani, Prusha Patel, et al. (2015) Gastric-type endocervical adenocarcinoma: a distinctive, aggressive variant with unusual metastatic patterns and poor outcome. *Am J Surg Pathol* 39: 1449–1457.
5. Togami S, et al (2016) Elevated serum CA19-9 and CEA in gastric-type adenocarcinoma of the cervix. *J Gynecol Oncol* 27: e21.
6. Bhatla N, Jonathan S Berek, Mauricio Cuello Fredes, Lynette A Denny, Seija Grenman et al. (2019) Revised FIGO staging for carcinoma of the cervix uteri. *Int J Gynaecol Obstet* 145: 129–135.
7. Hodgson A, et al (2021) Endocervical adenocarcinoma: towards improved classification and clinical management. *Histopathology* 78: 161-176.