

GASTRIC-TYPE ADENOCARCINOMA OF CERVIX: MYRIADS OF CLINICAL PRESENTATIONS AND MANAGEMENT STRATEGIES

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INTRODUCTION

- Gastric-type adenocarcinoma of cervix represents a rare malignancy, independent of Human Papilloma Virus
- Compared to usual-type adenocarcinoma, this variety poses a bigger threat to survival, owing to its aggressive clinical course
- The **most common** sub-type of HPV-independent adenocarcinoma
- Classified as a separate entity by WHO in 2020

10% Cervical adenocarcinoma worldwide encompass the Gastric-type

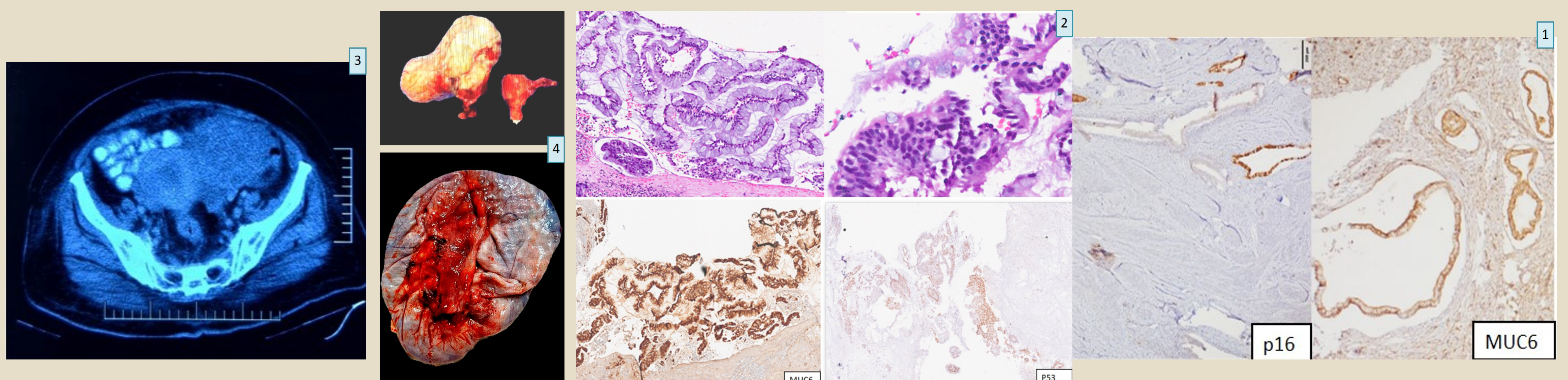
We present here details of selected four patients, harboring this carcinoma, but with diverse clinical presentations and treatment approaches

METHODS

- A retrospective analysis and follow-up performed from 2022-2024
- Objective:** To study the demographic characteristics, clinical presentation and disease evolution of patients with Gastric-type adenocarcinoma of cervix
- Inclusive of patients with this histology who received treatment in All India Institute of Medical Sciences, New Delhi

CASE SERIES

Age	Clinical presentation	Relevant history	Primary treatment	Final Histopathology Report	Disease course and management
CASE 1 31	Cervical polypectomy with diagnostic laparoscopy elsewhere; histopathology of a friable polypoidal growth exhibiting moderately differentiated adenocarcinoma	Nulliparous; history of postcoital bleeding over 3 months	Radical Hysterectomy with bilateral pelvic lymphadenectomy	Endocervical adenocarcinoma 2.5x2x0.5 cm tumour in posterior lip of cervix p16 and p40 negative, ER positive No lymphovascular or perineural invasion Involved resected cuff margins	<ul style="list-style-type: none"> Adjuvant concurrent chemoradiation followed by brachytherapy 7 months following RT, relapse diagnosed in left para-aortic lymph node Nodal irradiation with concurrent Cisplatin provided 18 months later, profuse persistent discharge per vagina, along with bleeding per rectum Biopsy from vault confirmed recurrence of endocervical adenocarcinoma, gastric type Currently, started on systemic therapy with Carboplatin, Paclitaxel and Bevacizumab
CASE 2 45	<ul style="list-style-type: none"> Diagnosed with metastatic endocervical adenocarcinoma stage IVB elsewhere Received three cycles of Carboplatin, Paclitaxel and Bevacizumab from another hospital Progressive disease on imaging Deteriorating performance status 	Profuse bleeding per vagina for 5-6 months	Started on second-line Capecitabine and Oxaliplatin	Gastric type histology confirmed on block review	<ul style="list-style-type: none"> Rapid disease progression in lungs, with new-onset ascites Even after six cycles of third-line Irinotecan, ascites increased with worsening general condition Currently has opted for best supportive care with control of local infection at a hospital in her hometown
CASE 3 52	Fungating ~5 cm endocervical growth, along with left-sided large solid adnexal mass (10x9 cm)	Persistent watery discharge and bleeding per vagina	Currently on Palliative chemotherapy (Carboplatin + Paclitaxel)	Histopathology from both adnexal mass and cervix confirmed adenocarcinoma, gastric type, p16 negative, demonstrating intracytoplasmic mucin	<ul style="list-style-type: none"> Within a span of three months, developed gross ascites and omental and peritoneal metastases Performance status improved on palliative chemotherapy
CASE 4 77	<ul style="list-style-type: none"> Abdominal distension Radiological findings showing 20x16x10 cm abdominopelvic solid mass with cystic areas of necrosis Primary histology showed mesenchymal tumour 		Laparotomy with Ascitic fluid cytology + Total Abdominal Hysterectomy + Bilateral Salpingo-oophorectomy + Total Omentectomy + Bilateral pelvic and para-aortic lymph node dissection Intraoperatively: Uterus and left adnexa normal; multiple enlarged pelvic lymph nodes; multiple mucinous deposits over left gonadal vessel	Final histopathology reported as cervical sections showing gastric-type adenocarcinoma, patchy p16, positive for CK7, MUC5, MUC6 Contrastingly, right ovary showed fibrothecoma	<ul style="list-style-type: none"> Due to deep stromal invasion, adjuvant chemoradiation advised Patient declined further interventions Disease-free following 17 months of surgery



DISCUSSION

- Previous clinical studies have reported this histology to be refractory to conventional treatments such as chemotherapy and radiotherapy, especially at advanced stage
- Aggressive features have been noted with widespread dissemination to distant sites, such as omentum, peritoneum and other organs
- Metastases to ovaries, lymph nodes and resistance to radiotherapy have been proven to be more common in adenocarcinoma, and are specific features of gastric-type histology
- Our case series demonstrate varied clinical scenarios at presentation, having an age range from young female 31 years, to elderly 77 years (mean age 51.2 years). All 4 patients received different lines of treatment, and experienced contrasting clinical courses
- Additionally, up to 10% of gastric type adenocarcinoma cases are associated with Peutz-Jeghers syndrome, caused by germline mutation in STK11/LKB1
- This subtype of cervical cancer resembles pancreato-biliary tumours and intestinal-type gastric adenocarcinoma in both histology and genomic drivers due to increased alterations in KRAS, TP53, SMAD4, CDKN2A, ERBB2 and RNF43
- ERBB2-altered cases treated with Trastuzumab have shown excellent clinical outcomes as reported by Ehmann et al. and therefore, DESTINY-PanTumor02 may show remarkable therapeutic strategy for these tumours in future

CONCLUSION

- Gastric-type histology of cervical adenocarcinoma portends extremely poor outcome, and multiple challenges are encountered to combat its deleterious clinical course.
- Given the rarity of the disease, further collaborative case studies are much needed to approach and treat this subtype.

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