

CASE REPORT

A Case of Mucinous Neoplasm of Appendix with Pseudomyxoma Peritonei and Ovarian Metastasis

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ABSTRACT

Appendicular mucinous neoplasm is a rare malignancy with varying symptoms. Presence of mucinous ascites indicates pseudomyxoma peritonei (PMP). Pseudomyxoma peritonei (PMP) is mostly due to appendicular neoplasm. Ovarian mass with mucinous ascites is mostly metastatic in 80% cases. Therefore, extensive workup by imaging and tumor markers should be done before proceeding for surgery. Appendicular mass is most likely to be diagnosed by imaging usually contrast-enhanced computed tomography (CECT). Here, we present an unusual case of 44-year-old nulliparous patient presenting with PMP and eventually diagnosed to have mucinous adenocarcinoma of appendix.

Keywords: Appendicular carcinoma, Mucinous carcinoma, Ovarian metastasis, Pseudomyxoma peritonei.

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INTRODUCTION

Mucinous ovarian carcinoma comprises only 3% of all ovarian cancer.¹ Eighty to eighty-five percent of mucinous cancers are secondary, and commonest primary site is gastrointestinal tract (GIT) (45%).² These metastatic cancers contain extracellular mucin >50% of their tumor volume. It is a rare neoplasm of vermiform appendix characterized by villous adenomatous changes of the appendiceal epithelium. Pseudomyxoma peritonei (PMP) comprises only 2% cases³ and mostly associated with the appendicular carcinoma, but rarely with ovarian ca too. Low-grade appendiceal mucinous neoplasm (LAMN) accounts for only 1% of GI malignancy.⁴ It is found in less than 0.3% of appendix specimen. These are diverse and classified as colonic type or mucinous cystadenocarcinoma.

CASE

A 44-year-old nulliparous woman complained of abdominal distension for last 16 days which was rapid in progress. She also complained that she had anorexia and indigestion like symptom for last 1 month for which she consulted in private and given conservative management. She has no history of any hematemesis or hemochezia. Her menstrual cycle was regular. Abdominal examination revealed ill-defined mass of 28 weeks size was palpable, with smooth surface and nontender with relative mobility and moderate ascites. Ascites was mucinous in nature. Per vaginally uterus could not be felt distinctly, and a 15 × 10 cm cystic mass felt which was mobile and nontender with smooth surface and well defined.

Her tumor markers came out to be chronological age (CA) 125–102 IU/L and carcinoembryonic antigen (CEA)—122 IU/L. In her contrast-enhanced computed tomography (CECT), a large ovarian mass of 10 × 15 cm solid cystic in appearance seen along with thickening of appendicular base (Fig. 1). Her endoscopy colonoscopy and mammography were normal (Fig. 2).

She was subsequently suspected to have appendicular mucinous carcinoma and planned for CRS. She underwent TAH+BSO+TOTALOMECTOMY+RIGHTHEMICOLECTOMY+ILEO TRANSVERSE ANASTOMOSIS + BPLND + PALNS + BILATERA PARIETAL AND PELVIC PERITONECTOMY (Fig. 3). Her PCI was 21,

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Fig. 1: Ovarian mass with appendicular thickening

CC was 0, and SCS was 10. Her post-op period was uneventful, and she was subsequently discharged on Day 7. Her holoprosencephaly (HPE) report came out to be low-grade mucinous neoplasm of appendix (primary) and mucinous adenocarcinoma of ovary (secondary) (Fig. 4).

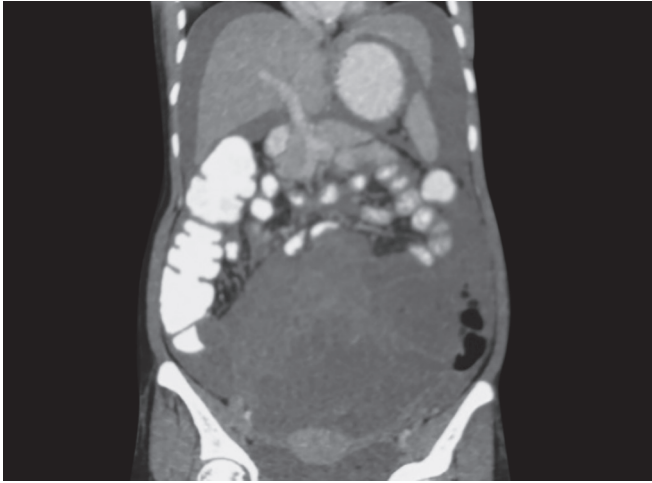


Fig. 2: Coronal section showing ovarian mass with appendicular thickening

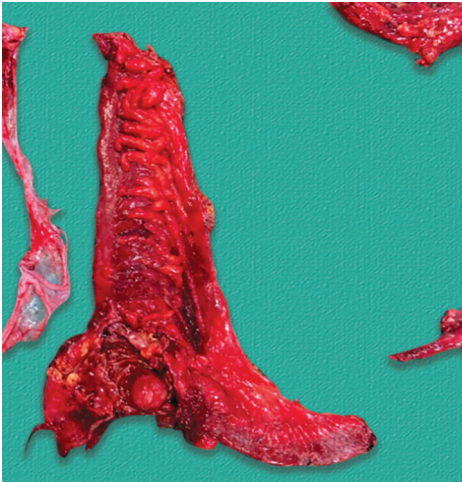


Fig. 3: Right hemicolectomy

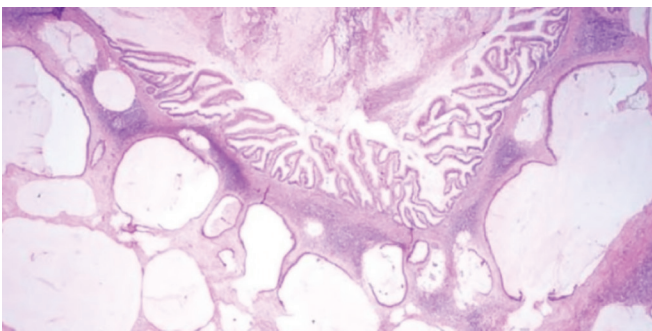


Fig. 4: Holoprosencephaly (HPE) of appendicular mucinous

DISCUSSION

These are rare adenomas localized in the appendix or the surrounding appendiceal mucosa wall.⁵ It usually presents with pain abdomen and features of intestinal obstruction. They are also often

found in asymptomatic patients. Complications include volvulus, small bowel obstruction, and PMP.⁶

Any mucinous carcinoma of ovary should be evaluated thoroughly before proceeding for surgery. In many cases, CEA will be raised or CA125/CEA ratio will be <25.⁷ In those cases, endoscopy colonoscopy mammography and pap smear should be done to rule out other primary malignancies. However, appendicular neoplasm may not be seen in above-mentioned invasive test. CT scan can identify mucinous carcinoma of appendix in some cases, but despite that in many cases, appendicular involvement is not diagnosed beforehand.⁸⁻¹⁰ Therefore, in mucinous CA of ovary routine, appendectomy is recommended by various guidelines including examination in gynaecological oncology (ESGO) guidelines too.

CONCLUSION

Overall, any patient presenting with features like ovarian malignancy should be thoroughly investigated with tumor markers and imaging. Primary ovarian mucinous is seen in 3% cases only; therefore, tumor marker and imaging analysis should be extensive. Also if the patient has mucinous ascites presenting as PMP, then appendicular base should be searched thoroughly in imaging.

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