TRANSVAGINAL REMOVAL OF LARGE LOW-GRADE APPENDICEAL MUCINOUS NEOPLASM

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Background

- Primary appendiceal cancers are rare with incidence of 1.2 per 100,000 people in the US
- Appendiceal cancers are classified into 4 subtypes: colonic-type adenocarcinoma, goblet cell carcinoma, neuroendocrine neoplasm, and mucinous neoplasm
- Mucinous neoplasm further subdivided into low grade appendiceal mucinous neoplasm (LAMN), high grade appendiceal mucinous neoplasm (HAMN), mucinous adenocarcinoma with or without signet ring cells, and mucinous signet ring cell carcinoma
- Discovered incidentally on pathology after appendectomy for acute appendicitis or when patient presents with disseminated disease
- Given physiologic location and patient demographics, appendiceal neoplasms can be misdiagnosed as adnexal masses

Clinical Presentation

- 59 year old female presenting with post-menopausal bleeding, cramping, abdominal bloating
- Evaluated by outpatient gynecologist – mobile mass palpable in right cul-de-sac on pelvic exam
- Biochemical evaluation preformed: CA-125, inhibin A/B and CA 19-9 within normal limits; CEA elevated to 12.3
- Transvaginal ultrasound revealed a 10.9x4.7 cm solid complex mass and thickened endometrium
- CT showing right pelvic, likely ovarian, mass without evidence of invasive disease
- Plan for robotic-assisted hysterectomy and bilateral salpingo-oophorectomy with gynecologic-oncology

Operative Course

- Ovaries, uterus and peritoneum normal without masses or implants
- Massively dilated appendix (10 cm) visualized in the right cul-de-sac
- General surgery was consulted for the intraoperative findings, patient's spouse consented for an appendectomy.
- Hysterectomy and bilateral salpingo-oopherectomy performed by gynecology in standard robotic fashion
- Appendectomy performed by general surgery, mesoappendix taken with bipolar device, base of appendix taken with stapler
- To prevent intraabdominal spillage, mass placed in a retrieval bag and delivered through the vaginal opening
- Vaginal cuff closed by gynecology
- Mass opened on the back table and mucin encountered
- Pathology: Tis LAMN with no high-grade dysplasia, extra-appendiceal mucin, or lymphovascular invasion; margins negative

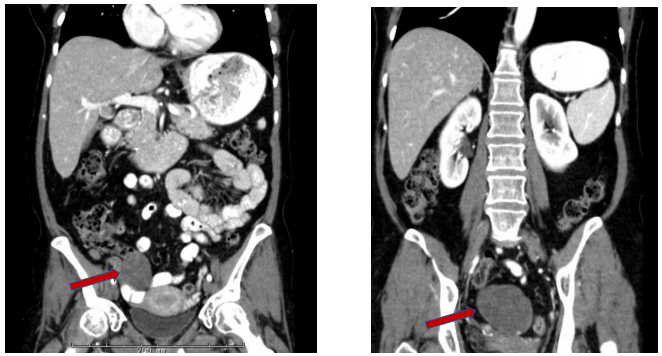


Figure 1: Representative CT images showing large heterogenous mass (red arrow) with calcifications in right pelvis.

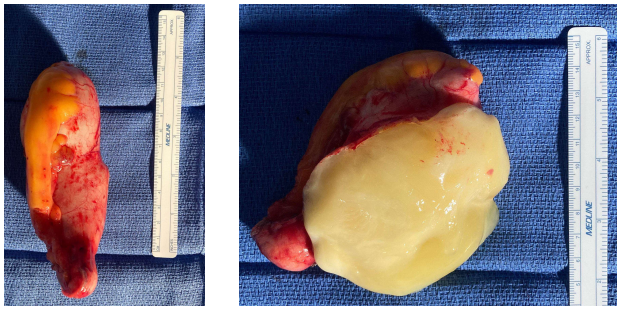


Figure 2: Surgical specimen. Appendiceal mass with mucinous contents.

Learning Points

- No additional therapy needed for Tis LAMNs without extra-appendiceal mucin or tumor spillage
- Importance of maintaining a broad differential in evaluation of intraabdominal lesions without conclusive biochemical findings
- Utility of transvaginal extraction for large specimens if participating in a combined surgical case with gynecology
- Increasing frequency of appendiceal cancer and shift to non-operative management of acute appendicitis may necessitate follow-up of those patients

References

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