Low-Grade Appendiceal Mucinous Neoplasm in a 34 Year Old Male: A Rare Incidental Finding After Appendectomy

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Introduction

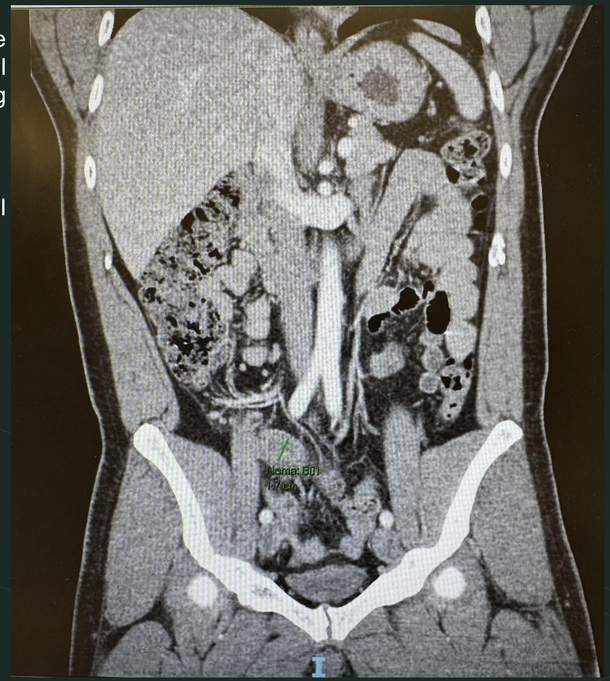
Appendiceal mucinous neoplasms are exceedingly rare, with an incidence of approximately 3500 per year being reported in the US. They have a slight female predominance, and generally present in patients in their 50s and 60s. We present an interesting case of a 34 year old with appendicitis whose postoperative pathology was positive for a low grade appendiceal mucinous neoplasm.

Case Presentation

- 34 year old male with no known past medical history presented with one day of worsening abdominal pain.
- The patient was hemodynamically stable; labs were significant for leukocytosis of 15,000.
- CT scan and exam confirmed acute appendicitis
- The patient was taken to the operating room for laparoscopic appendectomy
- Laparoscopy revealed an inflamed, dilated appendix with a small perforation at the tip with surrounding mucinous material. The mucinous fluid was suctioned out and the appendix was removed without complication.

Results

- Pathology for this patient was significant for acute appendicitis as well as a Low Grade Appendiceal Mucinous Neoplasm with acellular mucin reaching visceral peritoneum
- Pathological stage of pT4a (9th version AJCC staging)
- The surgical margins were negative for neoplasm
- Other findings included periappendicitis with focal microscopic perforation.



Discussion

- This is an exceedingly rare case of appendiceal mucinous neoplasm in a healthy 34-year-old man, staged as pT4a due to acellular mucin involving the appendiceal serosa.
- Standard management is appendectomy with long-term surveillance using CT imaging.
- Management of T4a LAMNs remains controversial; although extra-appendiceal cells increase recurrence risk, studies have shown that right hemicolectomy offers no proven benefit over appendectomy.
- Most institutions favor surveillance with imaging and tumor markers, reserving CRS and HIPEC for progression to PMP.
- This patient followed up with Surgical Oncology and ultimately elected to forgo surgery and proceed with surveillance. Given this patient's micro-perforation, vigilant surveillance will be particularly important due to the elevated risk of recurrence.