Small Bowel Obstruction Secondary to Endometriosis and Hydrosalpinx

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INTRODUCTION

Small bowel obstructions account for 2-4% of emergency department visits, 15% of hospital admissions, and 20% of emergency surgical operations for abdominal pain [1]. The majority of SBOs are secondary to adhesions from prior abdominal surgery, complex hernias, or neoplasms [4]. Less frequent causes include underlying inflammatory bowel disease, gallstones, volvulus, and intussusception. Obstructions in the absence of previous abdominal surgery are unlikely to resolve with conservative measures and may warrant surgical intervention; suspicion for pathological etiology increases in the absence of surgical adhesions.

Obstructions secondary to gynecologic processes such as PID, endometriosis, and ovarian cancer, are rare but important etiologies to consider. PID and endometriosis have both been reported as causes of SBO in female patients, however, there have been no documented cases of SBO secondary to both processes occurring simultaneously. We present a unique case of small bowel obstruction secondary to right hydrosalpinx in the setting of previous PID, as well as endometriosis of the appendix.

CASE

A 32-year-old female, with PMH of right hydrosalpinx and previous PID and no past surgical history, presented to the ED with three-day history of severe epigastric abdominal pain associated with multiple episodes of non-bloody, non-bilious emesis. Physical exam was significant for a softly distended abdomen with epigastric tenderness. Bloodwork was unremarkable for any associated leukocytosis, lactic acidosis, or metabolic abnormalities. CT of the abdomen and pelvis revealed multiple dilated and fluid-filled small bowel loops with a transition point in the right lower quadrant, associated mesenteric edema around the distal ileum, and free fluid [Fig 1]. She was taken to the operating room and found to have dense adhesions in the right lower quadrant involving the terminal ileum, appendix, sigmoid colon, and right ovary containing a paratubal cyst [Fig 2].

CLINICAL IMAGES

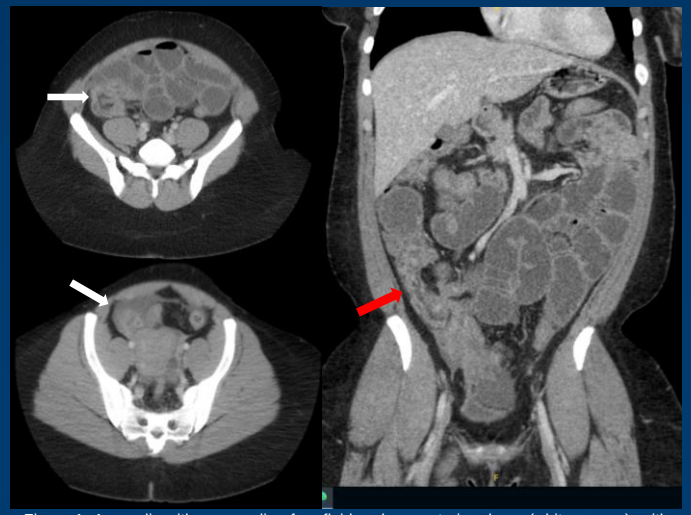

Figure 1. Appendix with surrounding free fluid and mesenteric edema (white arrows), with associated small bowel obstruction evidenced by dilated loops of bowel with transition point in the right lower quadrant (red arrow).

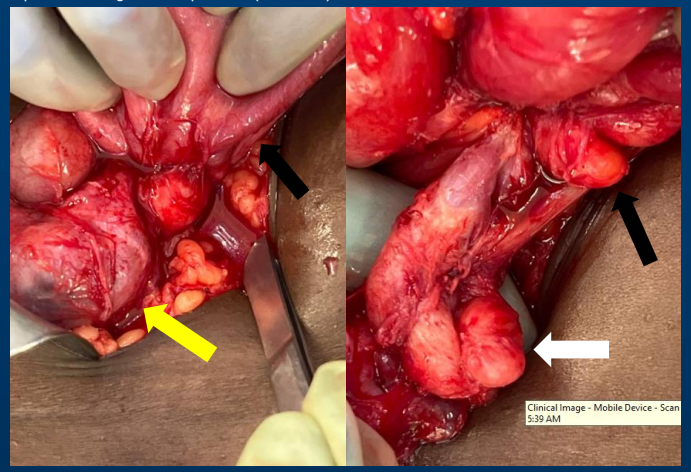

Figure 2. Dense adhesions between the right ovary (yellow arrow), appendix (white arrow), and adjacent bowel (black arrows).

CASE (CONTINUED)

An intraoperative gynecology consult was placed, and it was noted that these dense adhesions were likely secondary to PID. Lysis of adhesions, appendectomy, and excision of right paratubal cyst were performed. The patient was discharged home on POD 7 with a 14-day antibiotic treatment for PID. Final pathology showed endometriosis within the appendix and a benign paratubal cyst.

DISCUSSION

This is the first case of SBO secondary to adhesions caused by chronic hydrosalpinx in the setting of PID and appendiceal endometriosis. Although gynecologic processes, such as PID and endometriosis, are commonly seen in the hospital setting, they are rare but significant causes of SBO. These etiologies should be considered in the differential diagnosis of a female patient presenting with SBO, especially in the absence of surgical history.

Few cases have been described in the literature [1-4], and there are currently no recommended guidelines for the management of these patients. Although both successful non-operative and operative approaches have been reported, a thorough history, complete with obstetric, gynecologic, and sexual history, and physical exam are essential when evaluating female patients with small bowel obstructions to aid in clinical decision-making and to prevent such rare etiologies from going unrecognized.

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