

Acute Colonic Pseudo-Obstruction Ogilvie's Syndrome: A Case Report and Literature Review

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Abstract: Acute colonic pseudo-obstruction (ACPO), or Ogilvie's syndrome, is characterized by dilation of part or all of the colon and rectum in the absence of any intrinsic or extrinsic mechanical obstruction. It predominantly affects people around the age of 60, with a male predominance. Its pathophysiology remains poorly understood. It often occurs in debilitated individuals. Although rare, it is serious, with a mortality rate of about 15% when treated early and appropriately, but increasing to 36–44% in cases of perforation or intestinal ischemia. Treatment may be medical, endoscopic, or surgical. Surgery is indicated when medical management fails or if there is suspicion of colonic perforation. Surgical options include cecostomy or possibly peroperative transanal pan-colorectal intubation using a multi-perforated tube via laparotomy. We report the case of an 18-year-old patient admitted for surgical management of acute intestinal obstruction due to Ogilvie's syndrome lasting more than 24 hours, treated with a decompressive colostomy.

Keywords: Ogilvie's Syndrome, Conservative Treatment, Neostigmine, Colostomy.

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INTRODUCTION

Acute colonic pseudo-obstruction (ACPO), or Ogilvie's syndrome, refers to acute dilation of a previously healthy colon without mechanical obstruction, with cecal diameter > 9 cm. The symptoms mimic those of acute lower intestinal obstruction. Abdominal CT scan helps visualize cecal distension, whose diameter predicts perforation risk. Through our case and a literature review, we urge surgeons to recognize this syndrome early to reduce the risk of cecal perforation.

CASE REPORT

An 18-year-old male followed in psychiatry (undiagnosed debility) with repeated episodes of constipation requiring enemas, presented to the emergency department with significant abdominal bloating, absence of stools and gas for 24 hours, but otherwise stable condition. An abdominal X-ray (AXR) showed dilation of the entire colon without air-fluid levels. A contrast-enhanced abdominopelvic CT scan

revealed cecal distension estimated at 17 cm. Blood tests were normal.

The patient was admitted to surgical ICU and received electrolyte rehydration, gastrointestinal rest (nasogastric tube, rectal tube with enemas and laxatives), and frequent monitoring. After a few hours, his clinical condition worsened with increasing abdominal distension, nausea, low-grade fever (38°C), and diffuse abdominal pain. Following an unsuccessful trial of neostigmine, persistent symptoms led to surgical intervention.

A midline laparotomy revealed massive colonic distension without any obstruction or cecal perforation, confirming Ogilvie's syndrome. A decompressive colostomy was performed. The patient resumed bowel function by postoperative day 1 and was discharged on day 4. The colostomy was reversed 90 days later. Clinical and radiological follow-up at 3 and 6 months was unremarkable.

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DISCUSSION

Ogilvie's syndrome is a pseudo-obstruction mimicking acute colonic obstruction without any actual blockage. It involves motility disorder and massive colonic distension. The autonomic nervous system (sympathetic and parasympathetic) governs colonic motility and secretions. Several studies cite risk factors such as trauma, obesity, infections, cardiac and renal diseases, diabetes, metabolic disorders, strong analgesics, narcotics, cesarean section history, age, and calcium channel blockers (e.g., nimodipine).

In our case, the patient had undiagnosed debility and recurrent constipation. Literature suggests that postoperative settings account for 50–60% of reported cases. Abdominal distension and tympany are frequent signs. Opioids are commonly implicated in Ogilvie's syndrome. Sedatives may also impair intestinal motility by depressing vagal tone, further contributing to constipation. These effects are reversible upon stopping the medications.

Neostigmine has shown effectiveness in some studies, including the notable work by Pannec. Decompression colonoscopy is a third-line treatment after conservative and pharmacologic failure, with ~80% success and 15% recurrence rate. It allows both decompression and ruling out mechanical obstruction. An intracolonic tube may reduce recurrence. Mortality remains high (14–30%) even with proper treatment.

Our case emphasizes timely diagnosis and treatment strategy. Neostigmine is first-line, followed by colonoscopy if necessary, but without delaying surgery in complicated cases. Surgical interventions, although effective, carry high risk due to emergency context. Conservative management (gastrointestinal aspiration, NPO, neostigmine) often succeeds. Surgical intervention depends on cecal diameter and clinical condition; thresholds vary between 9 and 12 cm. Maloney proposed a treatment algorithm: conservative first, surgery upon failure.



Figure 1: Abdominal distension

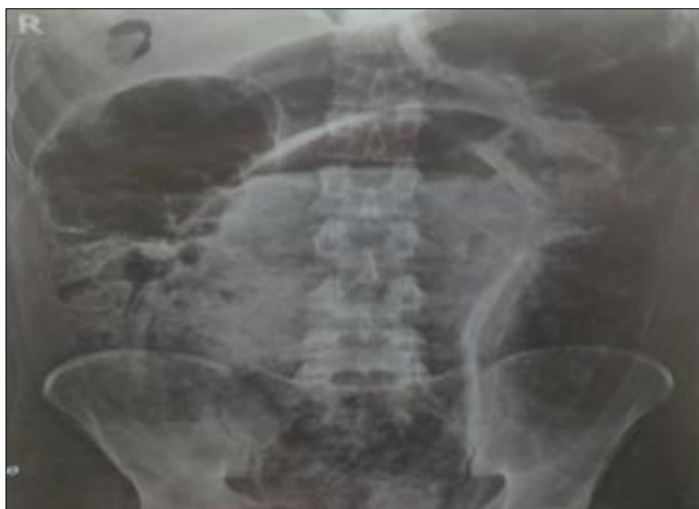


Figure 2: Abdominal X-ray (without preparation) showing aerocolia



Figure 3: Axial CT scan of the abdomen showing intestinal distension without signs of cecal perforation



Figure 4: Intraoperative view: distension of the colonic frame

CONCLUSION

Though rare, Ogilvie's syndrome must be considered in colonic obstruction without organic cause. Prompt diagnosis is vital to avoid complications. The first-line investigation is contrast-enhanced abdominal CT; cecal diameter is key. Drug therapy and colonoscopy are usually effective but should not delay surgical intervention when needed.

Declarations

Conflicts of Interest: None declared.

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