

Case Report

A Case of Paracecal Hernia Presenting with Strangulation - A Case Report

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Abstract

Internal Hernias (IH) are a rare cause of acute abdomen and intestinal obstruction in adults. IH has a reported autopsy incidence of 0.2 to 0.9% and is the cause of small bowel obstruction in 0.6 to 5.8% of the cases [1]. Among different types of internal hernias, paracecal hernia is a rare type. It presents as a lump in right iliac fossa with features of small bowel obstruction. Due to its rarity, nonspecific clinical findings and small window period to take action, a differential diagnosis of internal hernia must be kept in mind while approaching a patient with small bowel obstruction features and an urgent CT scan is advised before operating as it is a valuable aid to diagnose and operate subsequently. There might not be any previous history of herniation, strangulation or any specific risk factor/indication preceding herniation as in the case about to be mentioned.

Keywords: Gangrene; Internal Hernia; Intestinal Strangulation; Paracecal Hernia

Case Report

A 68-year-old man came to the ER walking with difficulty at 4pm with severe pain in the right iliac fossa since morning. Pain was mild at first but increased in severity since morning. Pain was very severe with a score of 10/10 at admission. The pain was associated with nausea and vomiting. He had 3 episodes of vomiting since the morning; non-projectile and the content was food particles. He had no history of fever or cough or trauma. No comorbidities like diabetes mellitus/hypertension/cardiac problems/chest condition. There was no recent history of any drug use/abuse. On examination, the patient was afebrile; blood pressure of 150/90 mm Hg, pulse rate of 112/min and a saturation of 98%. Patient was conscious and oriented. Systemic examination of cardiovascular system, respiratory system and central nervous system did not reveal any impairment. On abdominal examination, a tender, palpable mass in the right iliac fossa was noted. Guarding rigidity was present. There was no abdominal scar or any indication of previous trauma.

A Computerized Tomography (CT) scan of abdomen and pelvis was immediately taken which showed the following Figure 1:

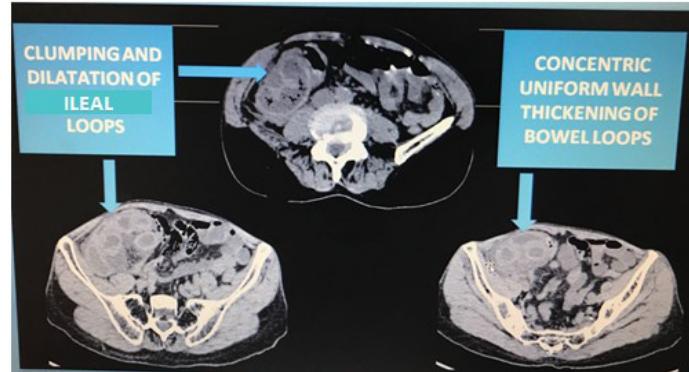


Figure 1: Computerised Tomography Scan Showing Clumping and Dilatation of Ileal Loops and Concentric Uniform Wall Thickening of Bowel Loops.

In view of the clinical and imaging findings, the patient was shifted to the operation theatre immediately. Intraoperatively, small bowel and omentum were found to be adherent in RIF. Omentum separated. Defect strangulating the bowel segment was released. Adhesiolysis performed. Detortion of bowel done and approximately 2.5 feet of gangrenous segment resected followed by end to end anastomosis in 2 layers. Thorough exploration of the contaminated cavity and peritoneal cavity done Figure 2.

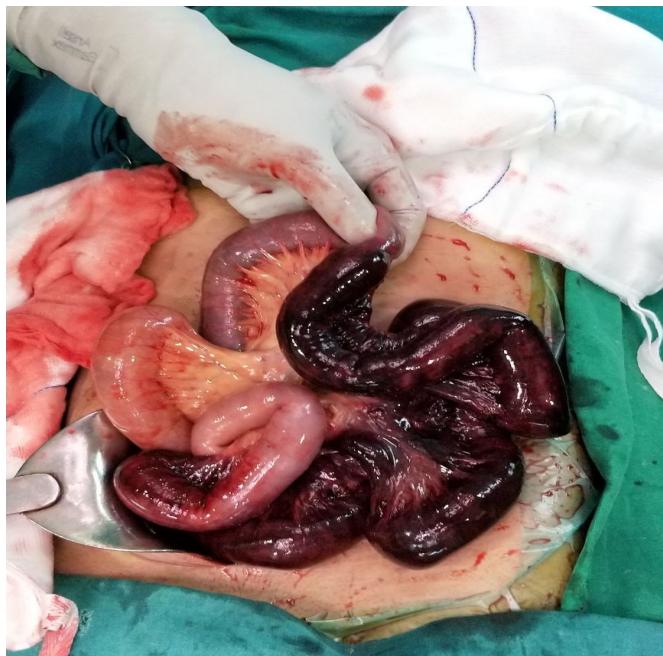


Figure 2: Intraoperative Picture Showing Gangrenous Segment Due to Strangulation.

The patient was kept nil by mouth for 2 days with iv fluids and medications. He was then started on liquids, gradually progressing to normal diet with removal of drain. The recovery was uneventful and patient was discharged on 5th post-operative day.

Discussion

An Internal hernia (IH) is a protrusion of intestines or other abdominal organs through a normal or abnormal orifice in the peritoneum or mesentery, occasionally leading to strangulation or incarceration. Internal Hernias (IH) are a rare cause of acute abdomen and intestinal obstruction in adults. IH has a reported autopsy incidence of 0.2 to 0.9% and is the cause of small bowel obstruction in 0.6 to 5.8% of the cases [1]. However, if strangulated and left untreated, internal hernias have an overall mortality greater than 50% [2]. Preoperative suspicion and diagnosis in an emergency setting are difficult due to rarity of the entity, nonspecific clinical presentation, and limited utility of imaging in cases of acute intestinal obstruction [3]. Internal hernias are a rare but important cause of intestinal obstruction given the high mortality associated but are often underdiagnosed. Primary internal hernias should be kept in the differential diagnosis of acute intestinal obstruction in adults with no previous history of surgery or trauma. Since physical examination findings are nonspecific, a high index of clinical suspicion along with urgent CT is suggested to aid in the preoperative diagnosis of IH. Early surgical intervention is crucial to avert the high risk of associated morbidity and mortality. While conducting emergency laparotomy for intestinal obstruction, the rare type of

primary IH as seen in our case should be kept in mind. [4] Age, delayed laparotomy time (>3 days after the onset of the symptoms) and the presence of a comorbidity were related to morbidity [5].

An Internal Hernia (IH) is an infrequent cause of Small Bowel Obstruction (SBO), with a reported autopsy incidence of 0.2 to 0.9%, and is the cause of small-bowel obstruction in 0.6 to 5.8% of the cases [6]. The aperture can be normal, encased with a sac or either abnormal, not possessing a sac. Congenital anomalies due to improper intestinal rotation, previous trauma, vascular or inflammatory diseases, or postsurgical iatrogenic are factors predisposing to internal herniation. Congenital and acquired defects in the mesentery of the cecum or appendix, may lead to development of a pericecal hernia. Internal hernias are generally classified into six types: Para duodenal, pericecal, foramen of Winslow, trans mesenteric, pelvic and supravesical, and intersigmoid.

In a case study, it was concluded that lump with features of small bowel obstruction can be a diagnostic dilemma, and a delay in diagnosing a strangulated pericecal hernia can lead to extensive bowel gangrene. [7] In another study, a case of congenital trans mesenteric Internal Hernia (IH) of jejunum and ileum with associated gangrene of bowel caused by a congenital mesenteric defect was reviewed. It was concluded that to prevent the delay in diagnosis of IH, we should make early use of the CT scan and consider urgent operation. So we recommend a high index of suspicion and early execution of laparotomy/ laparoscopy to avoid extensive enterectomy and to improve outcome.

Conflict of Interest

The author declares that there are no competing interests.

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