Gallstone Ileus: A Rare And Elusive Cause Of Intestinal Obstruction

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INTRODUCTION

Gallstone ileus is a rare complication of cholelithiasis and is one of the rarest forms of all mechanical bowel obstructions accounting for less than 1% of intestinal obstruction cases.

It is caused by the impaction of a gallstone within the gastrointestinal (GI) tract causing pressure necrosis between the 2 tissues that results in erosion and the formation of a cholecyst-enteric fistula. This direct access allows gallstones to move from the gallbladder to the GI tract.

The symptoms can be acute, intermittent, or chronic, with the most common being nausea, vomiting, pain, and abdominal distension. Imaging is usually performed with computed tomography, with pneumobilia being the most characteristic finding and the presence of a detectable gallstone in the intestinal lumen.

OBJECTIVE

The objective is to present a case of a patient with biliary ileus, as well as the therapeutic approach used.

CASE PRESENTATION

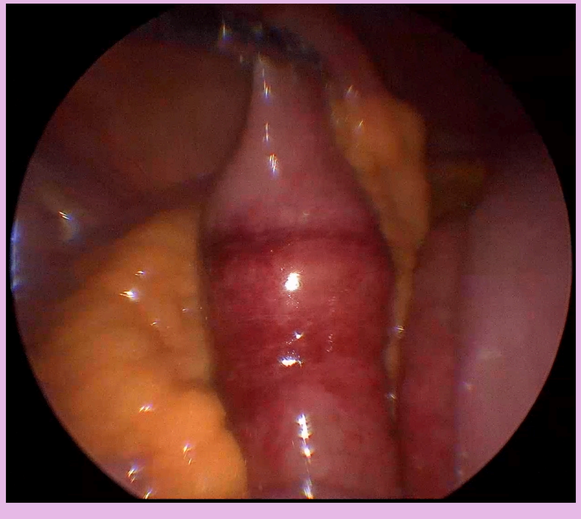
A 70-year-old male without any relevant past medical history, presented to the emergency department complaining of a 5 days generalized, intense and increasing abdominal pain, accompanied by nausea, vomiting, and abdominal distension.

Physical examination showed a distended abdomen, decreased peristalsis, and generalized tenderness.

Laboratory results revealed hyperbilirubinemia predominantly of the direct type and elevated alkaline phosphatase levels.

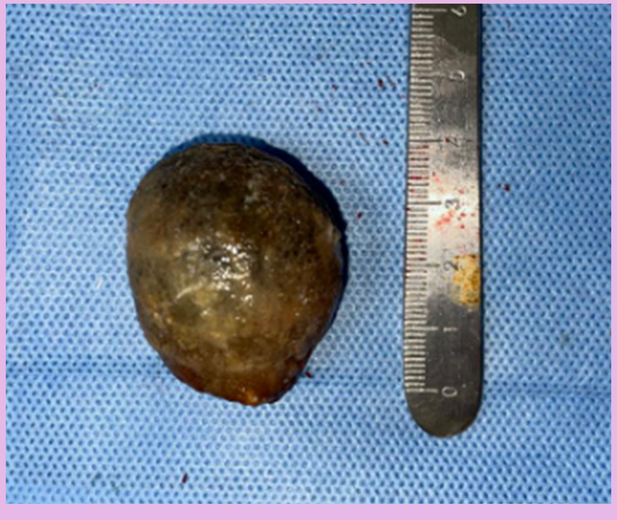


Arrow head: radiopaque stone at distal ileum



A CT scan showed the presence of pneumobilia, associated with gas at the level of the gallbladder, with wall thickening and irregularity, and an image suggestive of a fistulous tract at the second portion of the duodenum. There was dilation of jejunum and ileum up to 5.5 cm in diameter, with air-fluid levels and a "stack of coins" pattern. A radiopaque stone with a radiolucent center measuring 3.8 x 3.3 cm was identified in the distal ileum.

Given the described findings, a diagnostic laparoscopy was performed. Dilated small bowel loops were identified, and exploration of these revealed a stone 50 cm from the ligament of Treitz. An enterotomy was performed using monopolar energy, and the stone was removed from the intestinal lumen. Intestinal contents were decompressed, and the enterotomy was subsequently closed with 2-0 Monocryl. The stone was extracted using an endobag, and a 19Fr closed drain was placed.



Hemostasis was verified, trocars were removed, the fascia was closed with Vicryl, and the skin with Monocryl, concluding the surgical procedure.

Patient postoperative course went uneventful. He was discharged due to improvement and has been followed up in outpatient consultations without complications.

CONCLUSIONS

Gallstone ileus is a rare but serious complication of cholelithiasis, responsible for 1% to 4% of mechanical bowel obstructions and up to 25% in older patients caused by the impaction of a gallstone within the gastrointestinal tract in which enterotomy with stone extraction is the preferred treatment

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