An unusual case of cholecysto-enteric fistula with gall stone ileus

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ABSTRACT

A gall stone ileus is defined as mechanical intestinal obstruction due to impaction of one or more gall stones within the gastrointestinal tract. A cholecysto-enteric fistula develops due to anomalous communicating tract between gall bladder and any segment of gastrointestinal tract. We report a case of 68 year old male referred from a peripheral hospital for subacute intestinal obstruction. Evaluation in our hospital revealed the presence of a cholecysto-enteric fistula with gall stone ileus. Emergency exploratory laparotomy was done and gall stones were retrieved.

Keywords: Cholecysto-enteric fistula; enterolithotomy; gall stone ileus; intestinal obstruction.

INTRODUCTION

Gallstone ileus is a relatively rare condition, occurring in 0.3-0.5% of individuals with cholelithiasis, resulting from the impaction of a gallstone in the gastrointestinal tract, typically in the terminal ileum. It accounts for approximately 1-4% of all cases of intestinal obstruction1. Diagnosis can be challenging due to an atypical symptom profile, necessitating a high level of clinical suspicion for prompt identification. As a result, it is often diagnosed only during surgery, resulting in a significant risk of morbidity and mortality 1,2.

Approximately half of the affected individuals have a prior history of gallstone disease. While around 4% of patients under the age of 65 experience bowel obstruction due to gallstone ileus, this rate rises to as high as 25% in patients aged 65 and older [3]. The inflammation and pressure exerted by the gallstone can erode the gallbladder wall, leading to the formation of a fistula between the gallbladder and the gastrointestinal tract, most commonly involving the duodenum. The most common site for the development of a cholecysto-enteric fistula is from the fundus of the gallbladder to the duodenum. Given its acute onset, appropriate management strategies need to be adopted 4.

CASE REPORT

A 68-year-old man, with a history of hypertension, presented with abdominal pain, vomiting, and constipation persisting for 8 days, with constipation occurring over the last 1 day. The abdominal pain was diffuse, gradual in onset, ranged from mild to moderate in severity, and was characterized by a dull, aching sensation. The pain worsened after meals but did not radiate to the back. Oral analgesics provided partial relief. He also reported experiencing 2-3 episodes of bilious vomiting daily for the past 8 days, which was partially alleviated by medication. The patient had experienced similar symptoms in the past.

On physical examination, he exhibited generalized abdominal distension and tenderness around the umbilical area, with no signs of peritonitis. Based on these findings, he underwent a contrast-enhanced computed tomography (CT) scan of the abdomen, which revealed pneumobilia, dilated bowel loops, and gallstones in the terminal ileum (Figure 1). A diagnosis of subacute intestinal obstruction secondary to gallstone ileus was established. He was subsequently scheduled for an emergency exploratory laparotomy. Intra-operatively, two stones measuring 2.5x2.5 cm and 2x2cm were present 4 cm proximal to ileocaecal junction (Figure 2). Cholecysto-duodenal fistula was identified and a loop ileostomy done. Patient had no complications in the post-operative period and was discharged on post-operative day 3.

Figure 1. CECT abdomen revealing gall stones in the terminal ileum
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REFERENCES