

# Gallstone ileus: a rare cause of small intestine obstruction

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## Abstract

A 77-year-old woman was admitted to our emergency department complaining of abdominal pain. Computed tomography was performed and showed aerobilia and a large 5.1 cm gallstone lodged in the small intestine. She underwent emergency surgery. Intraoperative findings noted small bowel obstruction caused by a large gallstone.

## CLINICAL IMAGE

### Gallstone ileus: a rare cause of small intestine obstruction

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## Key Clinical Message

Gallstone ileus is a very rare cause of mechanical bowel obstruction with often-delayed presentation and non-specific symptoms. Aerobilia is found in approximately 50% of patients with gallstone ileus.

## Case Description

A 77-year-old woman was admitted to our emergency department (ED) complaining of abdominal distension, vomiting, and nausea. During physical examination normal bowel sounds were auscultated, and there were no signs of abdominal flatulence or tenderness. Her routine blood tests were normal. However, her C reactive protein was elevated. Abdominal x-rays revealed dilated small bowel as well as air-fluid levels. A computed tomography (CT) was performed and showed aerobilia and a large 5.1 cm gallstone lodged in the small intestine. The patient was resuscitated with intravenous fluids and underwent emergency surgery. Intraoperative findings noted small bowel obstruction with the transition point at 70 cm from the ileocaecal valve caused by a large gallstone obstructing the lumen (figure 1A). A longitudinal 3 cm enterotomy was made proximal to the distal gallstone (figure 1B). The stone was removed, and the enterotomy was closed transversely (figure 1C, D).

Gallstone ileus develops in less than 0.5% of patients with cholelithiasis and accounts for less than 5% of non-strangulating mechanical small bowel obstructions. Patients have non-specific symptoms and the diagnosis is often delayed since symptoms may be intermittent and investigations may fail to identify the cause of the

obstruction. The majority of reported cases of obstruction demonstrate a gallstone larger than 20 mm in diameter [1]. If a clinician has a clinical suspicion of gallstone ileus but the patient has negative radiograph findings, a computed tomography (CT) scan should be performed. Aerobilia is found in approximately 50% of patients [2].

**Keywords:** Cholelithiasis, gallstone ileus, small bowel obstruction

### **Patient consent for publication**

A written informed consent was obtained from the patient for publication of this case report.

### **Conflict of interest**

There are no conflicts of interest to declare.

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None

### **Author contribution**

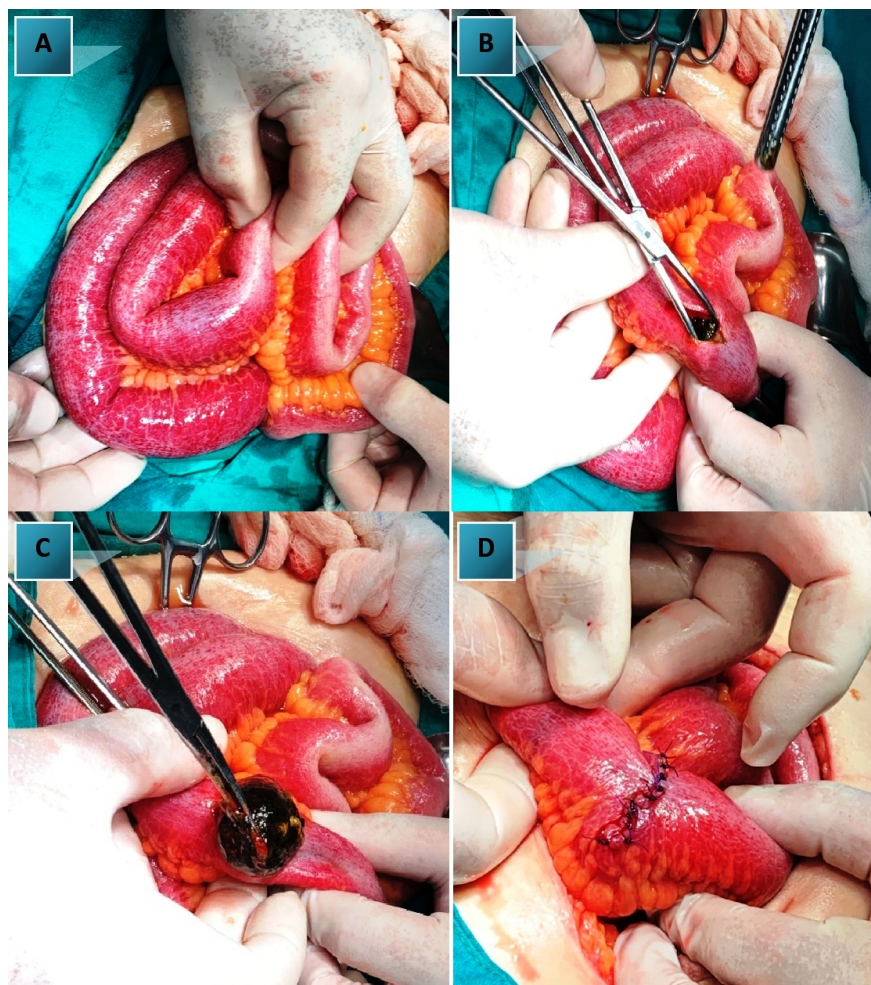
FM, DK, LT, G-IV, IP, FI, CK, and EL: contributed to the clinical data collection and prepared the case report. FM, LT and EL: contributed to the design of the case report presentation and performed the final revision of the manuscript.

### **Data availability**

Data available on request from the authors

### **References**

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**Figure 1:** (A) Impacted gallstone. (B, C) Small bowel enterotomy for removal of the impacted gallstone. (D) The enterotomy was closed transversely

