Gallstone Ileus Occurring 35 Years After Cholecystectomy: A Rare Cause of Small Bowel Obstruction

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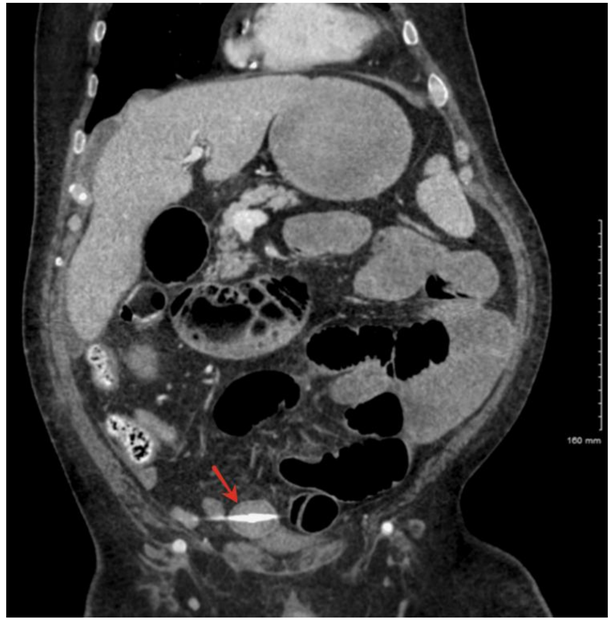
Case Presentation

- 72-year-old male with a history of diabetes mellitus, hypertension, coronary artery disease, diverticulitis and past surgical history significant for cholecystectomy in the 1980s presented with a three-day history of nausea, vomiting, diffuse abdominal pain, and generalized weakness.
- On admission, the patient was hemodynamically stable. Abdominal examination revealed mild distension without signs of peritonitis. Laboratory evaluation demonstrated leukocytosis, acute kidney injury, and metabolic acidosis.
- Initial computed tomography (CT) imaging revealed dilated small bowel loops measuring 5.3 cm in diameter and an intraluminal hyperdense lesion.
- Conservative management with nasogastric decompression and intravenous fluids was initiated; however, the patient's symptoms worsened, with persistent emesis. A repeat CT with oral contrast demonstrated multiple colonic diverticula and a small bowel obstruction with a transition point in the lower central abdomen.

Management

- Conservative management with nasogastric decompression and intravenous fluids was initiated; however, the patient's symptoms worsened, with persistent emesis. A repeat CT with oral contrast demonstrated multiple colonic diverticula and a small bowel obstruction with a transition point in the lower central abdomen.
- Exploratory laparotomy with extensive adhesiolysis, enterolithotomy, and repair of multiple ventral hernias

Imaging



CT image of the abdomen and pelvis with oral contrast demonstrating the obstructing gallstone within the distal ileum

Discussion

- Gallstone ileus is an uncommon cause of SBO, accounting for approximately 1-4% of all cases and up to 25% in elderly patients [1,2]. The condition typically develops when a large gallstone erodes through the gallbladder wall into the intestinal lumen, most often through a cholecystoenteric fistula [3]. Although this entity classically occurs in patients with an intact gallbladder, several reports have described its development years or even decades after cholecystectomy [4-8].The pathophysiology of post-cholecystectomy gallstone ileus remains unclear. The most widely accepted explanation is the persistence or recurrence of a biliary-enteric fistula that allows late passage of a gallstone into the bowel [9-11]. Other mechanisms include retained or spilled gallstones during previous surgery or de novo enterolith formation in a chronically stagnant bowel segment [12,13]. Regardless of etiology, delayed migration of a large, calcified stone can ultimately cause distal ileal impaction and mechanical obstruction.

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