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Large Gallstone Ileus

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A 92-year old man presented with a 5-day history of obstipation, nausea, and vomiting. A computed tomography (CT) scan of the abdomen revealed a 4.1-cm gallstone impacted in the sigmoid colon (Figure 1). The proximal colon was diffusely dilated in caliber consistent with obstruction (Figure 1B). The CT also showed a cholecystocolic fistula at the hepatic flexure of the colon (Figure 2) with an edematous gallbladder wall and a residual 3.8-cm gallstone. Under colonoscopic guidance the stone was fragmented using intraluminal shock wave lithotripsy and other endoscopic techniques. The pieces were retrieved (Figure 3, shown reassembled). Cholecystectomy, common hepatic duct repair, and fistula takedown were electively performed to prevent recurrence.

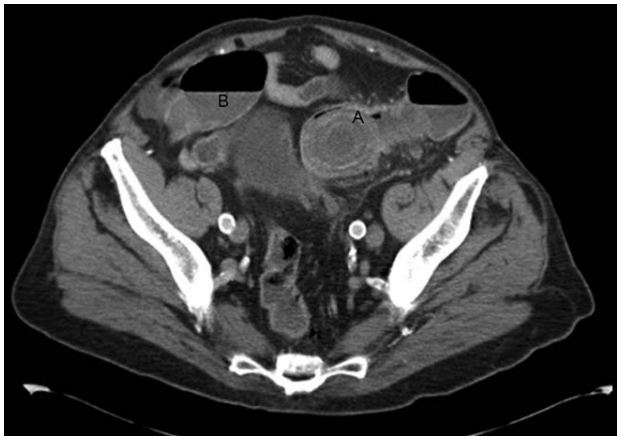

FIGURE 1. CT abdomen demonstrating impacted sigmoid gallstone.

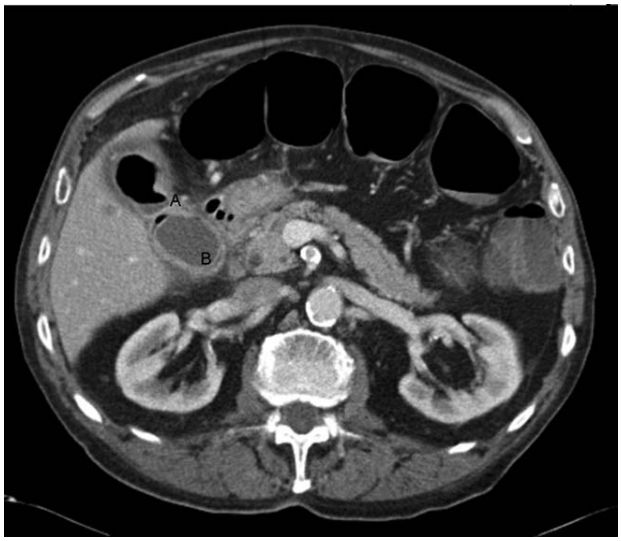

FIGURE 2. CT abdomen with evidence of bowl dilation.

Gallstone ileus is the mechanical impaction of gallstones within the gastrointestinal (GI) tract. It requires the formation of either a biliary-enteric fistula or less often a choledocho-enteric fistula. Usually the stone must be 2 cm or greater to cause obstruction.[1] The site of obstruction is typically the terminal ileum or ileocecal valve because of the smaller diameter lumen and less active peristalsis. Although mortality rates approach 15%,[2] this patient did remarkably well with early recognition, use of complex endoscopic removal, and avoidance of urgent laparotomy.

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FIGURE 3. Large gallstone (shown after removal and reassembly).

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